

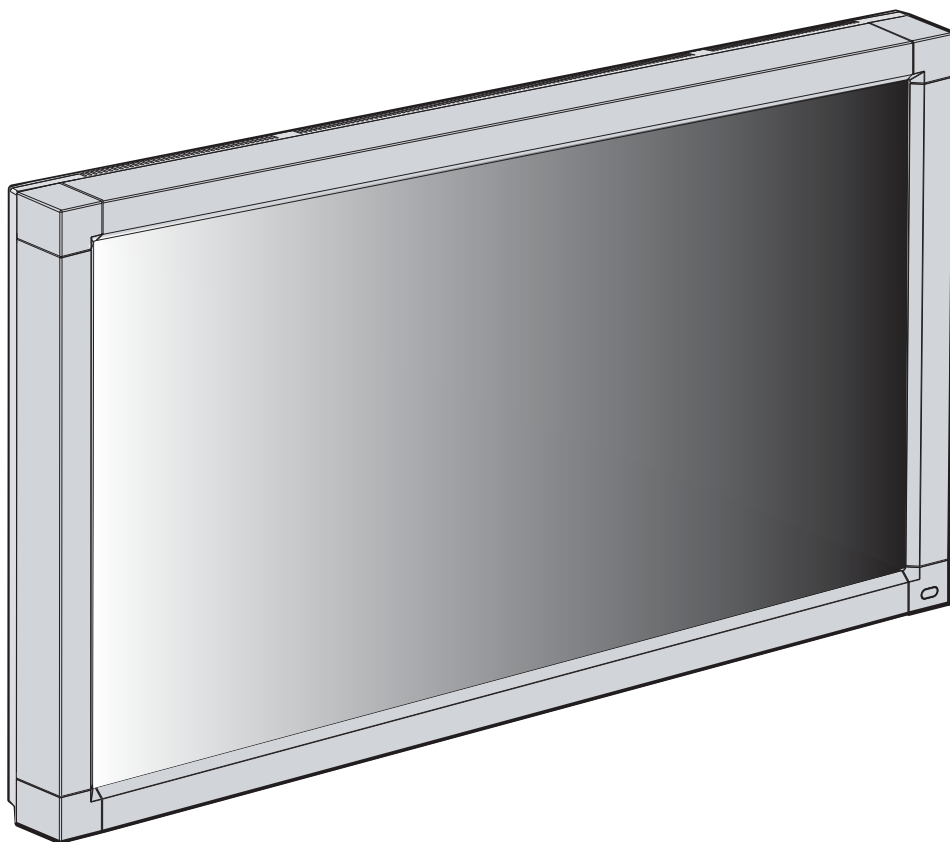


42" LCD Display Monitor

MODEL

LDT422V

USER'S MANUAL



English

English

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Features

Full 1920 x 1080 High-definition Resolution

Page 45

The LDT422V panel reproduces images from video and computer signals with precision and clarity, delivering full 1920 x 1080 high-definition resolution. The high-durability panel reduces the risk of image persistence in commercial applications.

Wide-range Color Temperature Adjustment

Page 34

The display color temperatures can be adjusted from 2,600 K to 10,000 K. Such a wide range adjustment is important for industries such as broadcasters and food retailers where color accuracy and flesh tones are critical.

Tiling Capability with Frame compensation

Page 39

Up to 25 panels (5 wide x 5 high) can be combined to create a single large image (i.e., video wall) or other high-impact signage. A frame compensation function is incorporated to compensate the width of panel bezels so that images are displayed with the utmost accuracy.

PiP, PoP and Side-by-side

Pages 37 and 43

Picture-in-Picture and Picture-out-of-Picture are available when you want to display video content from a video input source in the sub picture and display the PC input source in the main picture, and vice versa.

The native resolution as high as 1920 x 1080 can display these two input sources in the Side-by-side mode, ideal for broadcasting and video-conferencing applications.

Programmable Scheduling Function

Page 38

The monitor's operating schedule can be programmed for up to seven different scheduled time intervals by time, day of the week and input port. This allows video content from different inputs to be displayed on certain monitors within the same installation according to the schedule, and extends the monitor's life and saves the power by turning it off during those hours or days it is not in use.

Screen-saver Functions

Page 40

To reduce image persistence and maximize the panel life in demanding signage applications, the LDT Series is equipped with four screen-saver functions.

- GAMMA
- COOLING FAN
- BRIGHTNESS
- MOTION

Side Border Color Select

Page 40

When the 4:3 screen is displayed, the side border color can be selected from black, gray and white.

Power-on Delay

Page 39

For installations employing numerous monitors, the power-on delay function can power up the monitors sequentially with delay between 2-50 seconds after the power is applied. Using this function can prevent inrush current problems and reduce the overall electrical load requirements when a single power supply is used.

Flexible Landscape & Portrait Positioning

Page 15

Designed to enhance for heat dissipation and long-term reliability in both landscape (horizontal) and portrait (vertical) positions.

Closed Caption

Page 39

You can display captions.

When closed-caption video signals are input, you can select to display or hide the captions on the screen.

This monitor is compliant with EIA-608-A.

Important Information

DECLARATION OF CONFORMITY

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions. (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

U.S. Responsible Party: Mitsubishi Digital Electronics America, Inc.

Address: 9351 Jeronimo Road,
Irvine, California 92618 U.S.A.

Tel. No.: +1 - (949) 465-6000

Type of Product: Computer Monitor

Equipment Classification: Class B Peripheral

Model: LDT422V (BR931)



*We hereby declare that the equipment specified above
conforms to the technical standards as specified in the FCC Rules.*

Windows is a registered trademark of Microsoft Corporation. All other brands and product names are trademarks or registered trademarks of their respective owners.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Canadian Department of Communications Compliance Statement

DOC: This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

C-UL: Bears the C-UL Mark and is in compliance with Canadian Safety Regulations according to CAN/CSA C22.2 No. 60950-1.

FCC Information

1. Use the attached specified cables with this equipment so as not to interfere with radio and television reception.
 - (1) The power supply cord you use must have been approved by and comply with the safety standards of U.S.A.,
 - (2) Please use the supplied shielded video signal cable. Use of other cables and adapters may cause interference with radio and television reception.
2. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult your dealer or an experienced radio/TV technician for help.
3. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Important Information (continued)



WARNING



TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE. ALSO, DO NOT USE THIS UNIT'S POLARIZED PLUG WITH AN EXTENSION CORD RECEPTACLE OR OTHER OUTLETS UNLESS THE PRONGS CAN BE FULLY INSERTED.

REFRAIN FROM OPENING THE CABINET AS THERE ARE HIGH VOLTAGE COMPONENTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



CAUTION



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, MAKE SURE POWER CORD IS UNPLUGGED FROM WALL SOCKET. TO FULLY DISENGAGE THE POWER TO THE UNIT, PLEASE DISCONNECT THE POWER CORD FROM THE AC OUTLET. DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol warns user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any part inside this unit.



This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.



CAUTION

This LCD Monitor uses a lamp that contains mercury. Disposal of the lamp or the LCD Monitor with the lamp may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: www.eiae.org. (For US only).

Declaration

Declaration of the Manufacturer	
We hereby certify that the color monitor LDT422V (BR931) is in compliance with Council Directive 2006/95/EC: — EN 60950-1 Council Directive 2004/108/EC: — EN 55022 — EN 61000-3-2 — EN 61000-3-3 — EN 55024	and marked with  Mitsubishi Electric Corporation 2-7-3, Marunouchi, Chiyoda-Ku Tokyo 100-8310, Japan

Warning

This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

Declaration of the Manufacturer	
	Note: This symbol mark is for EU countries only. This symbol mark is according to the directive 2002/96/EC Article 10 Information for users and Annex IV, and/or to the directive 2006/66/EC Article 20 Information for end-users and Annex II. Your MITSUBISHI ELECTRIC product is designed and manufactured with high quality materials and components which can be recycled and/or reused. This symbol means that electrical and electronic equipment, batteries and accumulators, at their end-of-life, should be disposed of separately from your household waste. If a chemical symbol is printed beneath the symbol shown above, this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration. This will be indicated as follows: Hg: mercury (0,0005%), Cd: cadmium (0,002%), Pb: lead (0,004%) In the European Union there are separate collection systems for used electrical and electronic products, batteries and accumulators. Please, dispose of this equipment, batteries and accumulators correctly at your local community waste collection/recycling centre. Please, help us to conserve the environment we live in!

Safety Precautions, Maintenance & Recommended Use

FOR OPTIMUM PERFORMANCE, PLEASE NOTE THE FOLLOWING WHEN SETTING UP AND USING THE LCD COLOR MONITOR:

- **DO NOT REMOVE MONITOR BACK COVER.** There are no user serviceable parts inside and opening or removing covers may expose you to dangerous shock hazards or other risks.
Refer all servicing to qualified service personnel.
- Do not spill any liquids into the cabinet or use your monitor near water.
- Do not insert objects of any kind into the cabinet slots, as they may touch dangerous voltage points, which can be harmful or fatal or may cause electric shock, fire or equipment failure.
- Do not place any heavy objects on the power cord. Damage to the cord may cause shock or fire.
- Do not place this product on a sloping or unstable cart, stand or table, as the monitor may fall, causing serious damage to the monitor.
- When operating the LCD monitor with its AC 100-120 V power supply in North America, use a power supply cord provided with the monitor.
- When operating the LCD monitor with its AC 220-240 V power supply in Europe, use a power supply cord provided with the monitor.
- In UK, use a BS-approved power cord with molded plug having a black (10 A) fuse installed for use with this monitor. If a power cord is not supplied with this monitor, please contact your supplier.
- When operating the LCD Monitor with a 220-240 V AC power supply in Australia, use the power cord provided with the monitor.
If a power cord is not supplied with this equipment, please contact your supplier.
- For all other cases, use a power cord that matches the AC voltage of the power outlet and has been approved by and complies with the safety standard of your particular country.
- Do not place any objects onto the monitor and do not use the monitor outdoors.
- The inside of the fluorescent tube located within the LCD monitor contains mercury. Please follow the bylaws or rules of your municipality to dispose of the tube properly.
- Do not bend power cord.
- Do not use monitor in high temperature, humid, dusty, or oily areas.
- If monitor or glass is broken, do not come in contact with the liquid crystal and handle with care.
- If the LCD monitor is damaged and the liquid crystal leaks out, do not inhale or swallow it.
- Allow adequate ventilation around the monitor, so that heat can properly dissipate. Do not block ventilated openings or place the monitor near a radiator or other heat sources.
Do not put anything on top of the monitor.
- The power cable connector is the primary means of detaching the system from the power supply. The monitor should be installed close to a power outlet, which is easily accessible.
- Handle with care when transporting. Save packaging for transporting.

- Please clean the holes of back cabinet to reject dirt and dust at least once a year because of set reliability.
- If using the cooling fan continuously, it's recommended to wipe holes a minimum of once a month.
- When installing the remote control batteries;
 - Align the batteries according to the (+) and (-) indications inside the case.
 - Align the (-) indication of the batteries first inside the case.



CAUTION:

Immediately unplug your monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the monitor.
- If the monitor has been exposed to rain or water.
- If the monitor has been dropped or the cabinet damaged.
- If the monitor does not operate normally by following operating instructions.

Recommend Use

CAUTION:

- For optimum performance, allow 20 minutes for warm-up.
- Rest your eyes periodically by focusing on an object at least 5 feet away. Blink often.
- Position the monitor at a 90° angle to windows and other light sources to minimize glare and reflections.
- Clean the LCD monitor surface with a lint-free, non-abrasive cloth. Avoid using any cleaning solution or glass cleaner!
- Adjust the monitor's brightness, contrast, and sharpness controls to enhance readability.
- Avoid displaying fixed patterns on the monitor for long periods of time to avoid image persistence (after image effects).
- Get regular eye checkups.

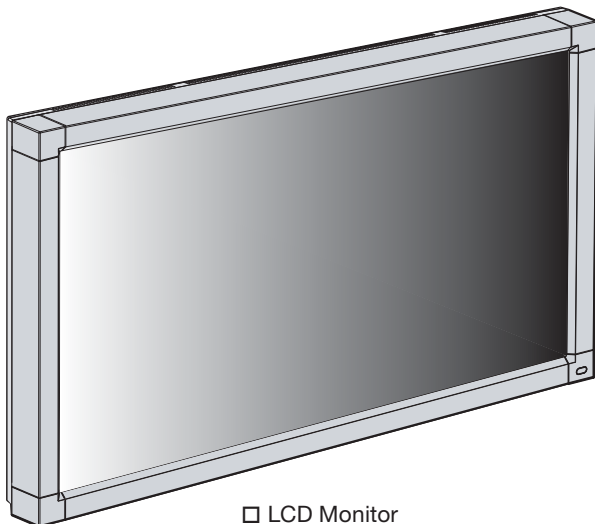
Ergonomics

To realize the maximum ergonomic benefits, we recommend the following:

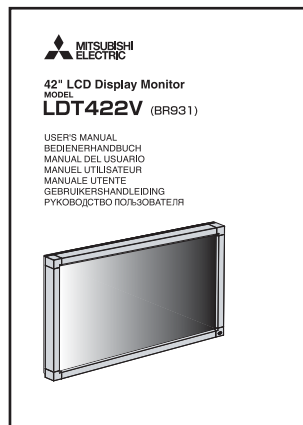
- Use the preset Size and Position controls with standard signals.
- Use the preset Color Setting.
- Use non-interlaced signals.
- Do not use primary color blue on a dark background, as it is difficult to see and may produce eye fatigue due to insufficient contrast.

Contents

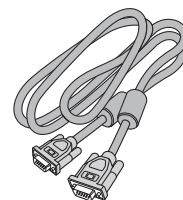
Your LCD monitor (LDT422V) comes with the following:



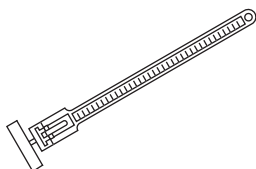
□ LCD Monitor



☑ User's Manual



□ Video Signal Cable
(Mini D-SUB 15-pin to
Mini D-SUB 15-pin Cable)



□ Clamper x 2
(For securing the power
cord and HDMI cable)



□ Screw (M4x8) x 2
(For Clamper)



□ Clamper x 2
(To prevent from falling)

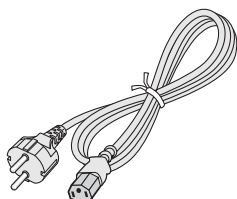


□ Screw (3x6) x 2
(To fix Main switch cover)

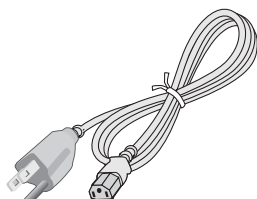


□ Wireless Remote
Control and AAA
Batteries

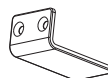
* The supplied power cord varies depending on destination.



□ Power Cord
For EU



□ Power Cord
For North America



□ Main switch cover

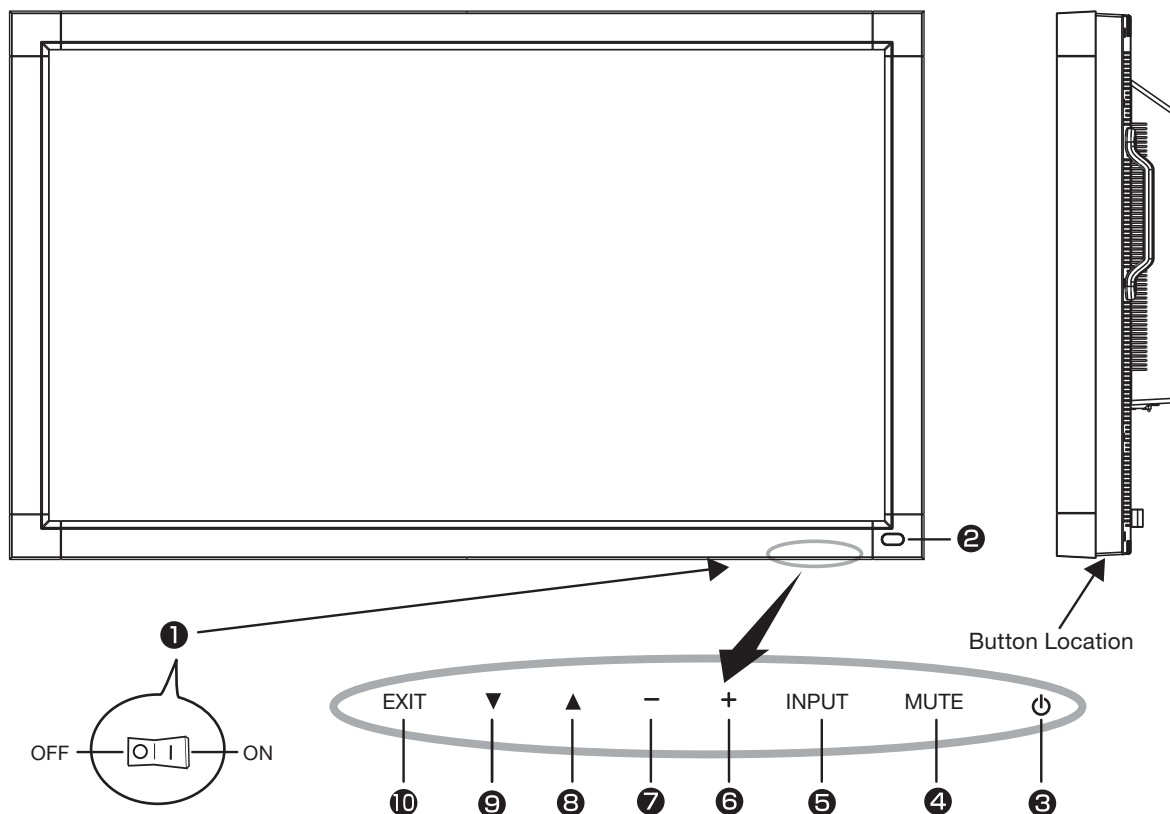
* For the use in the other regions, use a power cord that matches the AC voltage of the power outlet and has been approved by and complies with the safety standard of those regions or countries.

The following components are supplied as option.

- External Speakers
- Stands

Parts Name and Functions

Buttons, Switch, and Indicator



❶ Main Power Switch

Switches the main power on/off.

❷ Remote control sensor and Power indicator

Remote control sensor: Receives the signal from the wireless remote control.

Power indicator: Indicates the state of the LCD monitor.

- Steady green: The power is on.
- Steady red: The power is off.
- Steady green and red: The LCD monitor is in the sleep mode.
- Off: The main power is off.
- Steady red and blinking green: The LCD monitor is in the schedule standby mode.
- Blinking red: The LCD monitor has an error (detected by the self-diagnostic function).

❸ POWER button (⏻)

Switches the power on/off.

This button doesn't work when the power indicator is off.
Turn on the main power. (See page 24.)

❹ MUTE button

Switches the audio mute on/off.

❺ INPUT button

Displays the OSD menu to switch the video input.

You can select [RGB1], [RGB2], [RGB3], [RGB4], [DVD/HD], [VIDEO<S>], or [VIDEO] using the UP (▲) or DOWN (▼) button.

❻ PLUS (+) button

Acts as (+) button to increase the adjustment in the OSD menu.
Increases the audio output level when the OSD menu is off.

❼ MINUS (-) button

Acts as (-) button to decrease the adjustment in the OSD menu.
Decreases the audio output level when the OSD menu is off.

❽ UP (▲) button

Activates the OSD menu when the OSD menu is off.

Acts as ▲ button to move the highlighted area up to select an adjustment item in the OSD menu.

❾ DOWN (▼) button

Activates the OSD menu when the OSD menu is off.

Acts as ▼ button to move the highlighted area down to select an adjustment item in the OSD menu.

❿ EXIT button

Activates the OSD menu when the OSD menu is off.

Acts as EXIT button to go back to the previous OSD menu.

(Reference) Control Lock mode

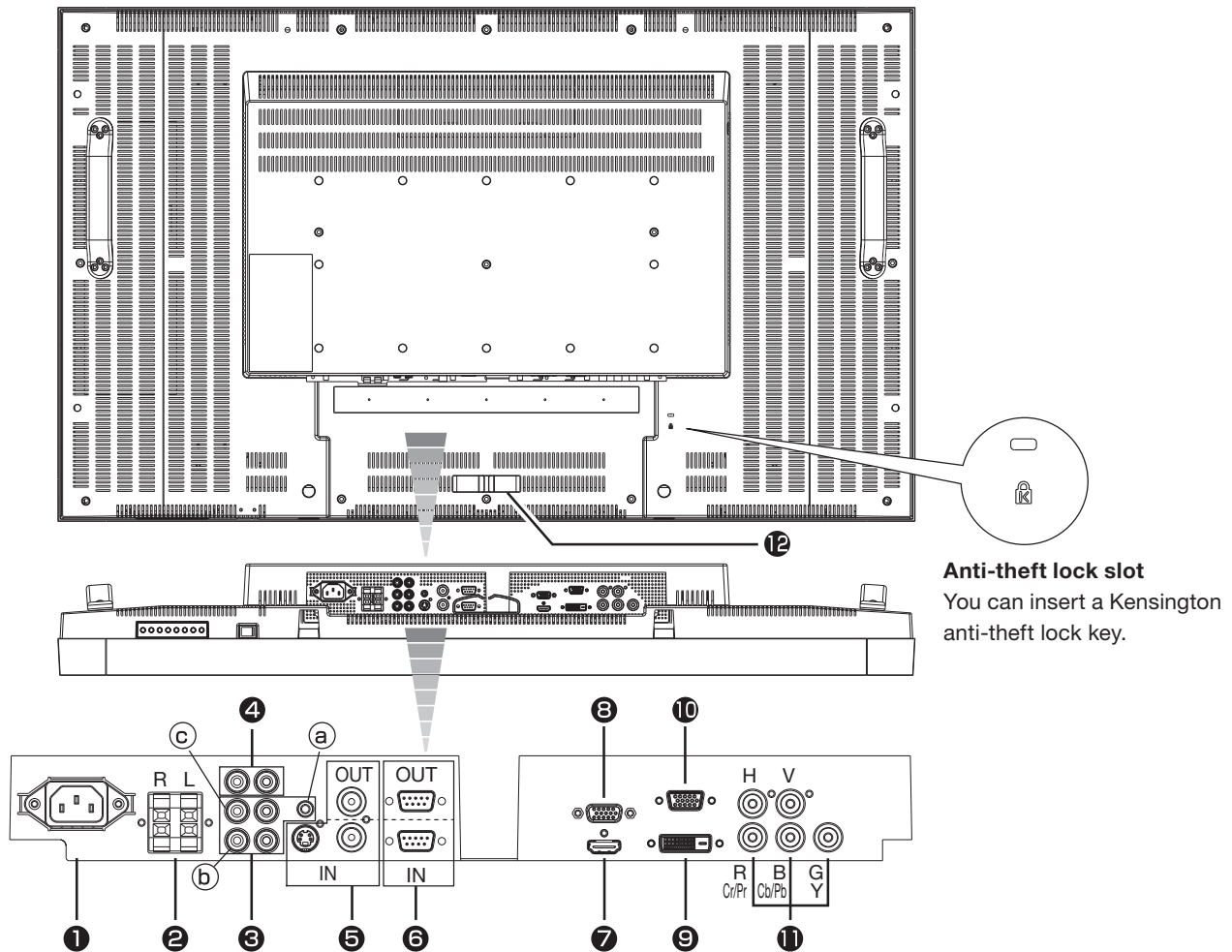
You can lock the operation buttons. See page 42.

NOTE:

For details about the OSD menu operation using the buttons, see "Basic operation of OSD." (See page 33.)

Parts Name and Functions (continued)

Connectors and Terminals



❶ AC IN (3-pin, with earth terminal)

Connects with the supplied power cord.

❷ EXTERNAL SPEAKER TERMINAL

Connects with the special stereo speakers (option).

❸ AUDIO IN

Connects with the audio output connector of external equipment such as a computer, VCR, and DVD player.

(a) AUDIO1: ϕ 3.5 stereo mini-jack connector

(b) AUDIO2: RCA connector

(c) AUDIO3: RCA connector

❹ AUDIO OUT (RCA)

Outputs the signal that is supplied to the selected AUDIO IN connector. Connects with an external audio amplifier, etc.

❺ VIDEO INPUT/OUTPUT (BNC/S connector)

Connects with video equipment.

S VIDEO IN: S-video input connector (MINI DIN 4-pin)

VIDEO IN: BNC connector

VIDEO OUT: BNC connector

❻ RS-232C connector (D-SUB 9-pin)

IN connector:

Connects with the RS-232C OUT connector of a computer or other connected LDT422V.

OUT connector:

Connects with the RS-232C IN connector of other connected LDT422V.

❼ RGB1 IN (HDMI)

Connects with the digital video output of a computer, DVD player, etc.

❽ RGB OUT (MINI D-SUB 15-pin)

Outputs the signal that is supplied to the RGB3 or RGB4 IN connector.

❾ RGB2 IN (DVI-D)

Connects with the digital video output of a computer, etc.

❿ RGB3 IN (MINI D-SUB 15-pin)

Connects with the analog video output of a computer, etc.

⓫ RGB4 IN, DVD/HD IN (BNC)

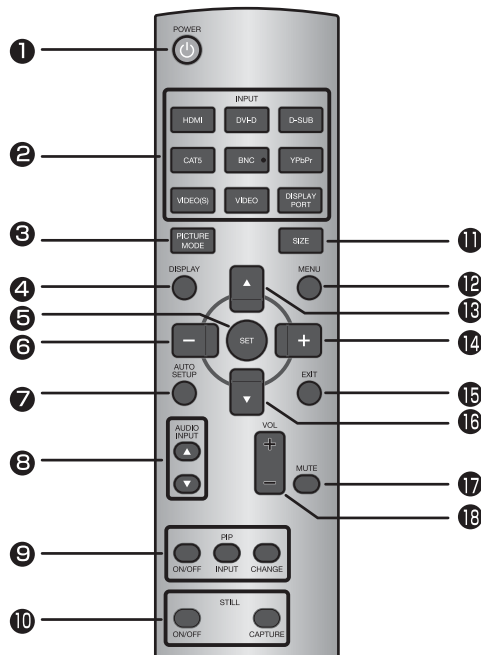
Connects with the analog video output of a computer, etc.

⓬ Cable Holder

Holds the connected cables.

Parts Name and Functions (continued)

Wireless Remote Control



❶ POWER button

Switches the power on/off.

* When the Power indicator is not glowing, no controls will work.

❷ INPUT buttons

Select the input signal from [RGB1] (HDMI), [RGB2] (DVI-D), [RGB3] (D-SUB), [RGB4] (BNC), [DVD/HD] (YPbPr), [VIDEO<S>], and [VIDEO].

NOTE:

The [CAT5] and [DISPLAY PORT] buttons don't work.

❸ PICTURE MODE button

Selects the picture mode from [HIGHBRIGHT], [STANDARD], [sRGB], and [CINEMA]. See page 26.

HIGHBRIGHT: The brightness is maximized.

STANDARD: Factory default setting.

sRGB: Suitable for color matching with sRGB-compliant devices.

CINEMA: Suitable for viewing movies.

❹ DISPLAY button

Displays the screen information. See page 42. When the remote control mode is LOCK, you can set it back to NORMAL by holding down the DISPLAY button for at least 5 seconds (see page 39).

❺ SET button

Accepts the settings made in the OSD menu.

❻ MINUS button (-)

Acts as (-) button to decrease the adjustment in the OSD menu. When the PIP mode is active, this button moves the sub picture to the left.

❼ AUTO SETUP button

Displays the auto setup menu. See pages 26 and 35.

❽ AUDIO INPUT buttons

Select the audio input from [AUDIO1], [AUDIO2], [AUDIO3], and [HDMI]. Note that [VIDEO<S>] and [VIDEO] cannot be selected. You can select [HDMI] only when the video input source is [RGB1].

❾ PIP (Picture-in-Picture) buttons

ON/OFF button: Switches the PIP or POP mode on/off.

INPUT button: Selects video to be displayed in the sub picture.

CHANGE button: Changes the main picture with the sub picture.

[Description]

PIP: Picture-in-Picture

The sub picture is displayed within the main picture.

POP: Picture-out-Picture

The sub picture is displayed to the bottom right of the main picture.

SIDE BY SIDE

The main picture and the sub picture are displayed side by side.

NOTE:

When the screen size is [CUSTOM] or [REAL], the PIP and POP modes don't work.

❿ STILL button

ON/OFF button: Switches the still picture mode on/off.

CAPTURE button: Captures the new picture.

⓫ SIZE button

Selects the picture size from [FULL], [NORMAL], [CUSTOM], [DYNAMIC], and [REAL]. See page 42.

⓬ MENU button

Switches the OSD menu mode on/off.

⓭ UP button (▲)

Acts as ▲ button to move the highlighted area up to select an adjustment item in the OSD menu. When the PIP mode is active, this button moves the sub picture up.

⓮ PLUS button (+)

Acts as (+) button to increase the adjustment in the OSD menu. When the PIP mode is active, this button moves the sub picture to the right.

⓯ EXIT button

Displays the previous OSD menu.

⓰ DOWN button (▼)

Acts as ▼ button to move the highlighted area down to select an adjustment item in the OSD menu. When the PIP mode is active, this button moves the sub picture down.

⓱ MUTE button

Switches the mute function on/off.

⓲ VOLUME buttons (VOL)

Pressing the plus (+) side increases the audio output level.

Pressing the minus (-) side decreases the audio output level.

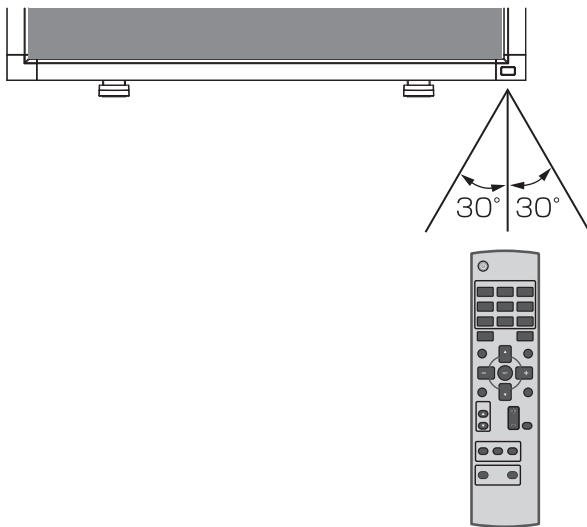
Parts Name and Functions (continued)

How to Use the Wireless Remote Control

Operating Range of the Wireless Remote Control

Point the wireless remote control toward the LCD monitor's remote control sensor during button operation.

Use the wireless remote control within a distance of about 7 m from the front of the LCD monitor's remote control sensor and at a horizontal and vertical angle of within 30° within a distance of about 3.5 m.



CAUTION:

The remote control system may not function when direct sunlight or strong illumination strikes the remote control sensor of the LCD monitor, or when there is an object in the path.

Handling the wireless remote control

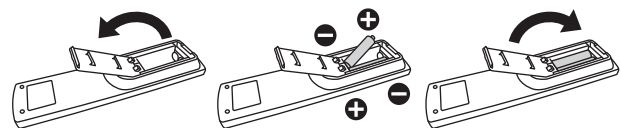
- * Do not subject to strong shock.
- * Do not allow water or other liquid to splash on the wireless remote control. If the wireless remote control gets wet, wipe it dry immediately.
- * Avoid exposure to heat and steam.
- * Other than to install the batteries, do not open the wireless remote control.

Installing and removing the Wireless remote control batteries

The wireless remote control is powered by 1.5 V AAA batteries.

How to install the batteries

1. Unlock and pull up the cover in the arrow's direction.
2. Align the batteries according to the (+) and (-) indications inside the case.
3. Replace the cover.



How to remove the batteries

1. Unlock and pull up the cover in the arrow's direction.
2. Remove the batteries.

CAUTION:

Incorrect use of batteries can result in leaks or explosion.

Be careful especially about the following points.

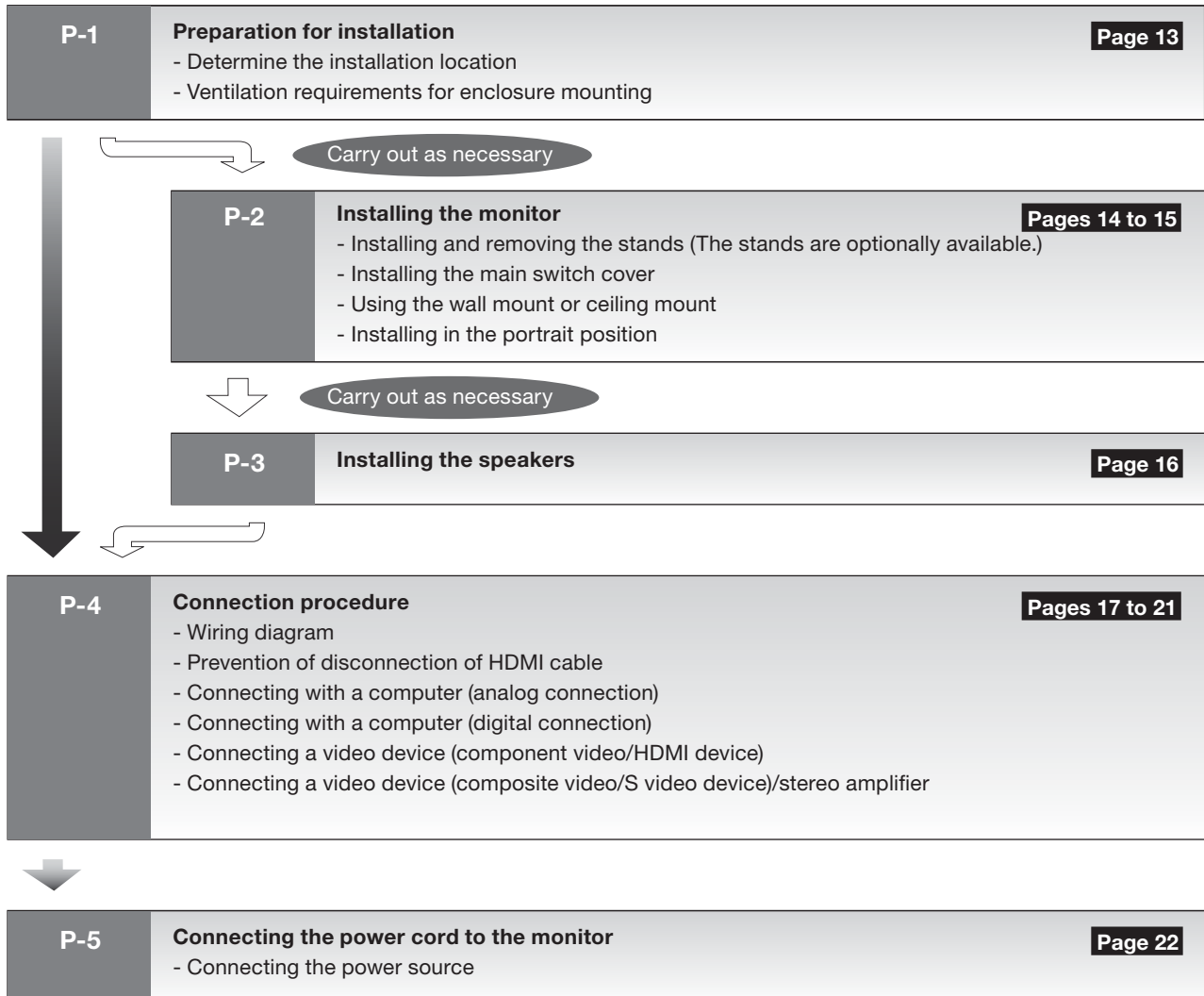
- Place "AAA" batteries matching the (+) and (-) signs on each battery to the (+) and (-) signs of battery compartment.
- Do not mix battery types.
- Do not combine new batteries with used ones. It causes shorter battery life or leakage of batteries.
- Remove dead batteries immediately to prevent battery liquid from leaking into the battery compartment. Don't touch exposed battery acid because it causes damage to your skin.

NOTE:

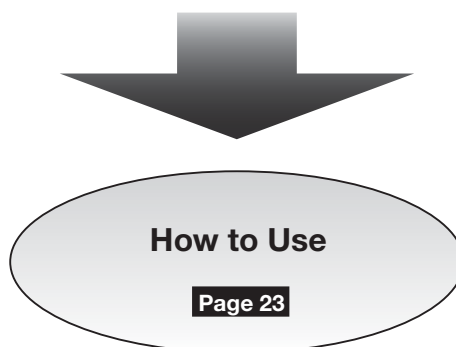
If you do not use the wireless remote control for a long period, remove the batteries.

Preparation for use

Flow of preparation

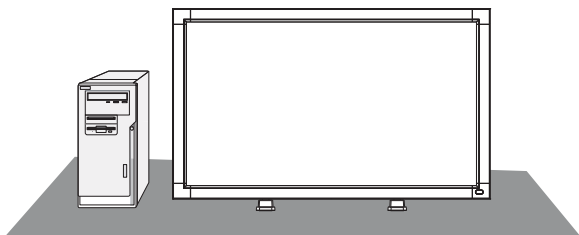


The monitor is ready for use.



Install the monitor on a flat, level, stable surface where the screen is easy to view.

(For installation using the option stand.)



Determine the installation location

CAUTION:

DO NOT ATTEMPT TO INSTALL THE LCD MONITOR BY YOURSELF.

Installing your LCD monitor must be done by a qualified technician. Contact your dealer for more information.

CAUTION:

MOVING OR INSTALLING THE LCD MONITOR MUST BE DONE BY TWO OR MORE PEOPLE.

Failure to follow this caution may result in injury if the LCD monitor falls.

CAUTION:

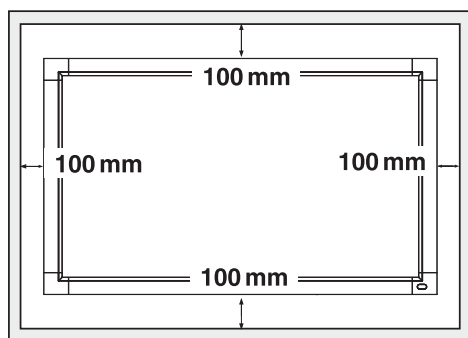
Do not mount or operate the monitor upside down, face up, or face down.

IMPORTANT:

Lay the protective sheet, which was wrapped around the LCD monitor when it was packaged, beneath the LCD monitor so as not to scratch the panel.

Ventilation requirements for enclosure mounting

To allow heat to disperse, leave space around the monitor as shown in the figure below.



CAUTION:

The upper limit of the operation guaranteed temperature range is 40°C. When installing the monitor in a case or an enclosure, ensure adequate ventilation to keep the temperature inside the case 40°C or lower by providing a cooling fan or ventilation holes in the case.

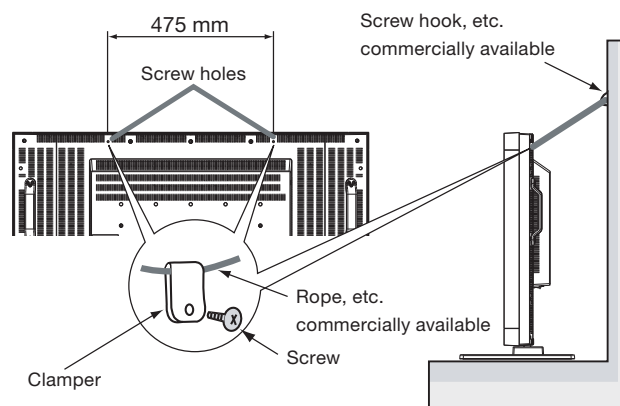
This LCD has a temperature sensor and cooling fan. If the LCD becomes hot, the cooling fan will turn on automatically. If the LCD becomes overheated, the "Caution" menu will appear. If the "Caution" menu appears, stop using the monitor and allow it to cool. When the LCD monitor is used in an enclosure or with protection on LCD surface, please check the inside temperature of the monitor by "HEAT STATUS" (See page 40). If the temperature is higher than the normal level, set "COOLING FAN" to ON using the SCREEN SAVER function (See page 40).

To avoid the monitor from falling

When installing the monitor using the tabletop stands (optional), take measures to prevent the monitor from falling over in case of an earthquake or other disaster to lessen the probability of injury and damage resulting from the fall.

As shown in the figure, secure the monitor to a solid wall or pillar using rope (commercially available) strong enough to bear the weight of the monitor. [LDT422V: approximately 23 kg (with the optional stands)]

Use of screw hooks (with opening) is recommended.



CAUTION:

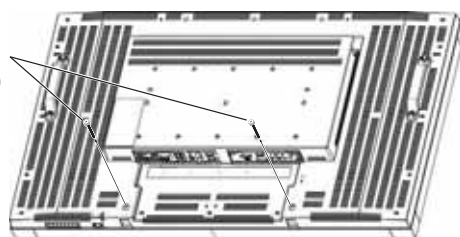
- The effect of the fall prevention substantially depends on the strength of brackets and base to which the fall prevention devices is attached. When you cannot ensure sufficient strength, provide adequate reinforcement.
- Though the recommended fall prevention is intended to lessen the probability of injury and damage, it doesn't assure its effectiveness against any kind of earthquake or disaster.
- Do not sleep where the monitor may topple over or fall in case of an earthquake or other disaster.
- Before moving the monitor, remove the rope that is securing the monitor. Failure to do so may result in injury or breakdown of the monitor.

Installing and removing the stands

The stands are available as option.

Refer to the user's manual of the stand for more information.

Screw x 2
(Accessories of
the option stand)



Option stand x 2
(Longer portion comes to the front.)

How to install the stands

1. Turn the monitor off.
2. Fasten screws on both sides of the monitor.

NOTE:

Install the stands so that their longer portions come to the front.

How to remove the stands

1. Spread the protective sheet on a flat surface, such as a desk.
2. Place the monitor on the protective sheet.
3. Remove the screws with a screwdriver and place them in a safe place for reuse.

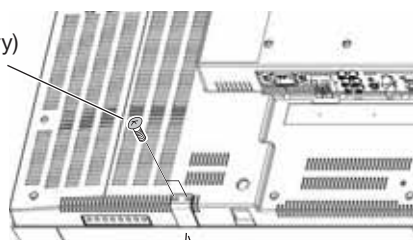
Installing the main switch cover

To prevent unauthorized operation of the main power switch, attach the main switch cover, which is supplied as an accessory.

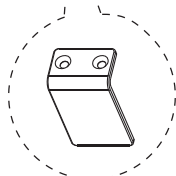
NOTE:

With the main power switch cover in place, the main power switch cannot be turned off. Remove the main power switch cover in order to switch off the monitor.

Screw x 2
(Accessory)



Main switch cover
(Accessory)



Using the wall mount or ceiling mount

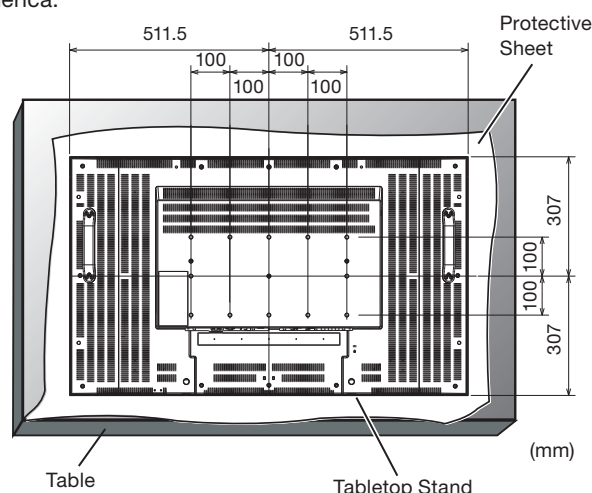
Lay the screen face down

Lay the protective sheet on a table, which was wrapped around the monitor when it was packaged, beneath the screen surface so as not to scratch the screen surface.

This device cannot be used or installed without the Tabletop Stand or other mounting accessory. Failure to follow the correct mounting procedures can result in damage to the equipment or injury to the user or installer. Product warranty does not cover damage caused by improper installation.

Failure to follow these recommendations can void your warranty.

Use M6 screws (having a length 10 mm longer than the thickness of the mounting bracket) and tighten them securely. Prevent the screws from loosening using spring washers, etc. MITSUBISHI ELECTRIC recommends using mounting interface that comply with TÜV-GS and/or UL1678 standard in North America.



CAUTION:

For preventing the monitor from falling.

- Install the monitor with metal brackets for wall or ceiling installation (commercially available) on your own responsibility. For detailed procedures of installation, refer to the instructions of the metal brackets.
- To lessen the probability of injury and damage resulting from fall of the monitor in case of earthquake or other disaster, be sure to consult the bracket manufacturer for installation location.
- To lessen the risk of falling of the monitor, thread commercially available rope through the handles at the right and left of the monitor and secure the rope to the wall mount brackets or ceiling mount brackets.
- Do not sleep where the monitor may topple over or fall in case of an earthquake or other disaster.

Installing in the portrait position

Conditions:

LDT422V can be installed in the portrait position, under the following conditions:

CAUTION:

Portrait position is available only when the monitor is wall-mounted or ceiling-mounted.
The stands (legs) can not be fitted to the monitor in the portrait position.
Placing the monitor in the portrait position will shorten the average life of the LCD backlight.
Operation Environment (Temperature) shall be limited, as shown below:

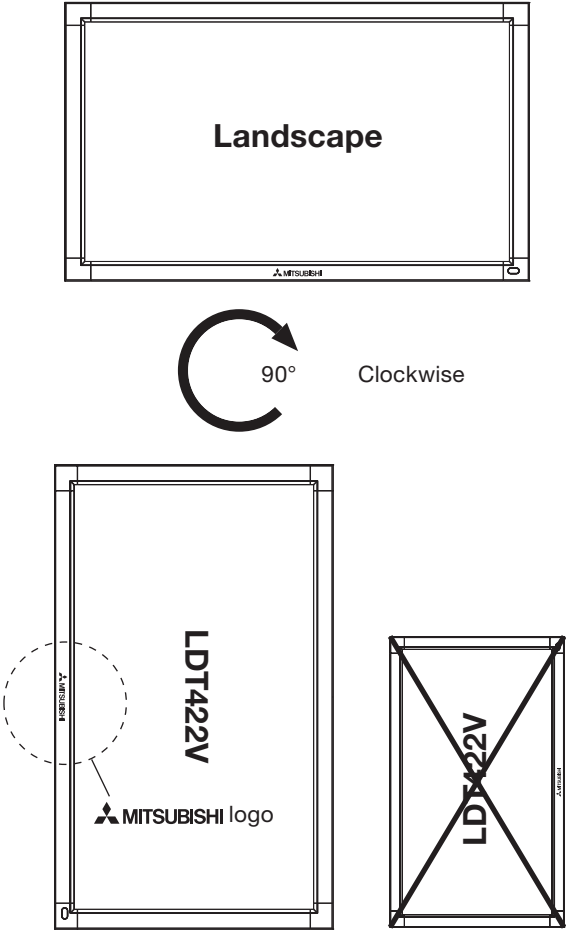
Operation Environment:

Temperature	5 - 35°C / 41 - 95°F
Humidity	20 - 80% (without condensation)

Place the monitor in the position shown below.
Do not place the monitor in landscape in any other manner than shown.
Optional speakers (SP-422V) can not be attached when the LCD monitor is installed in the portrait position.

How to set-up

The “ MITSUBISHI” logo should be on the LEFT side when viewed from the front of the monitor.

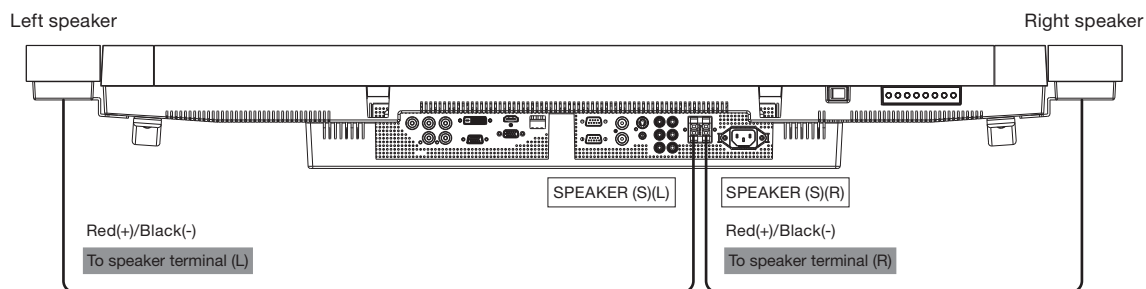


Before connecting the signal cable to PC and Video

- Optional speakers can be installed.
- Please refer to user's guide of the optional speakers for the detailed installation procedure.

How to install the optional speakers

1. Use the metal fittings and screws that are supplied with the option speakers.
2. Connect the cord of the left speaker to the SPEAKER (S) terminal (L) on the monitor, and the cord of the right speaker to the SPEAKER (S) terminal (R).

**NOTE:**

The speaker cord has polarity (+ and -). Match the colors of the speaker terminal and the connector of the cord.

CAUTION:

Do not move the monitor with the speakers installed.

The monitor and the speakers may be damaged and you may be injured if the monitor falls.

P-4 Connection procedure

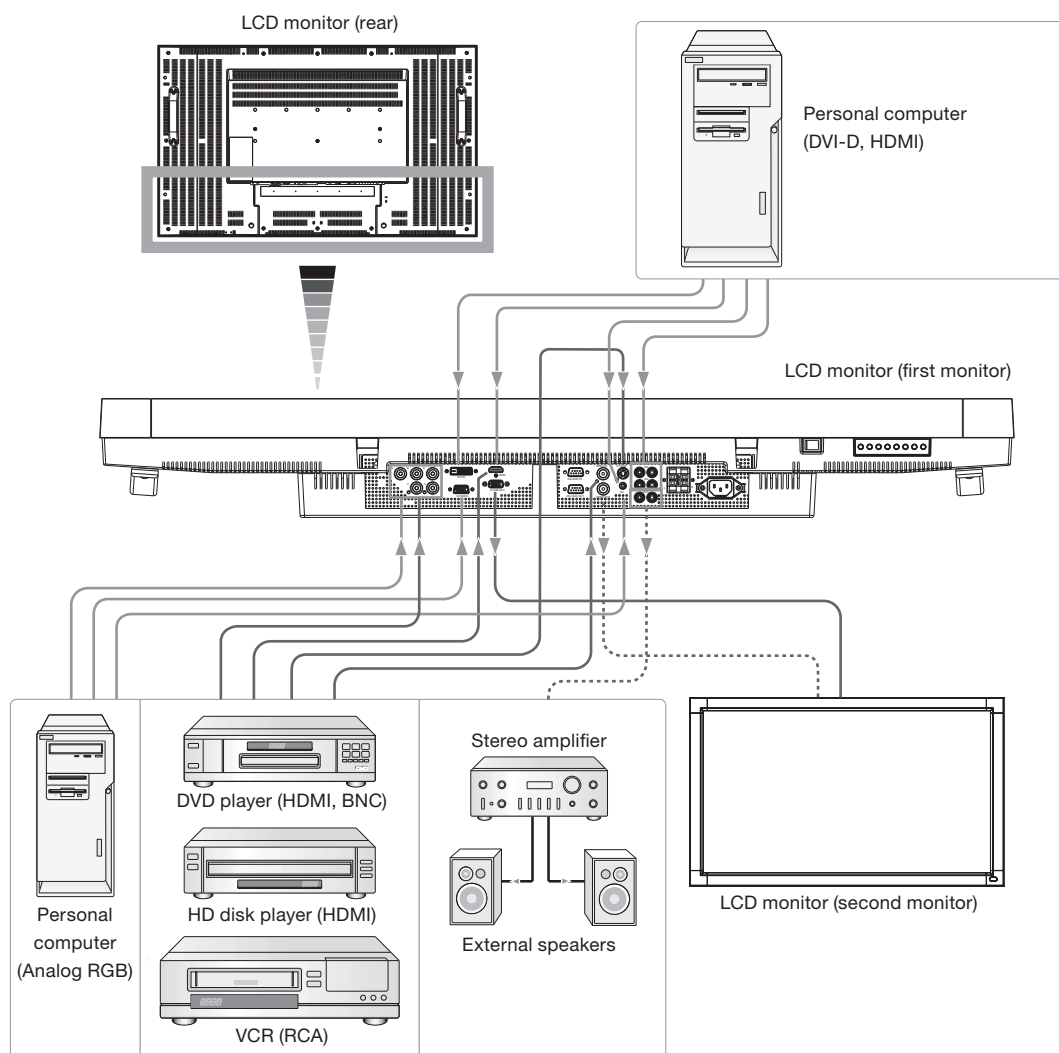
Before making connections

- First turn off the power of all the connected equipment before making connections.
- Refer to the user manual of each piece of equipment.

NOTE:

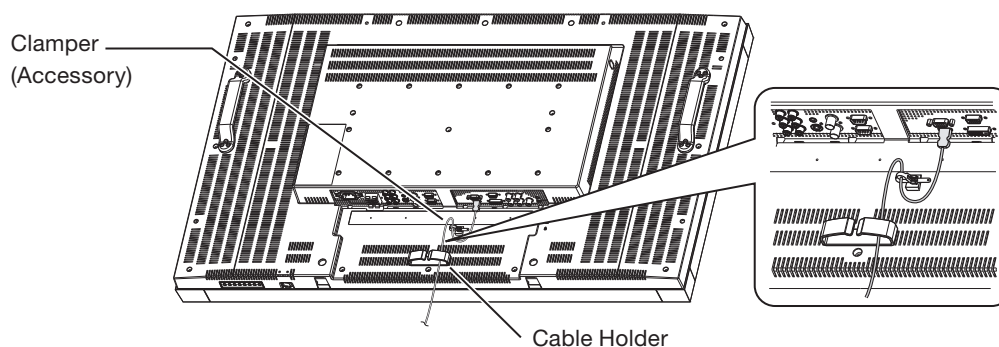
Please use the audio cable without resistance when the audio output terminal of the audio device and PC is stereo mini-Jack. When the audio cable with resistance is used, the audio level may not be increased or no audio may be output.

Wiring diagram



Prevention of disconnection of HDMI cable

The HDMI cable must be secured by the clumper to prevent it from being disconnected accidentally.



P-4 Connection procedure (continued)

Connecting with a computer (analog connection)

The monitor automatically distinguishes the timings shown in the table below and sets the screen information. When a PC or other device is connected, it automatically displays images properly.

<Factory preset timing>

	Resolution	Frequency		Remarks		Resolution	Frequency		Remarks
		Horizontal	Vertical				Horizontal	Vertical	
1	640 x 480	31.5 kHz	60 Hz		6	1280 x 1024	64.0 kHz	60 Hz	
2	800 x 600	37.9 kHz	60 Hz		7	1600 x 1200	75.0 kHz	60 Hz	
3	1024 x 768	48.4 kHz	60 Hz		8	1920 x 1080	67.5 kHz	60 Hz	Recommend timing
4	1280 x 768	48.0 kHz	60 Hz		9	1920 x 1200	74.0 kHz	60 Hz	
5	1360 x 768	47.7 kHz	60 Hz						

NOTE:

When a signal other than 1920x1080 is input, characters may be blurred and figures and objects may be distorted. Images may not be displayed correctly depending on the video card or driver being used.

Analog connection:

• Connection via RGB3 IN (D-SUB) connector

- (1) Connect an RGB cable (mini D-SUB 15-pin – mini D-SUB 15-pin) (accessory) to the RGB3 IN connector.
- (2) Select [RGB3] using the INPUT button on the monitor or the D-SUB button on the wireless remote control.

• Connection via RGB4 IN (BNC: R•G•B•H•V, or R•G•B•Csync, RGB sync on green) connector

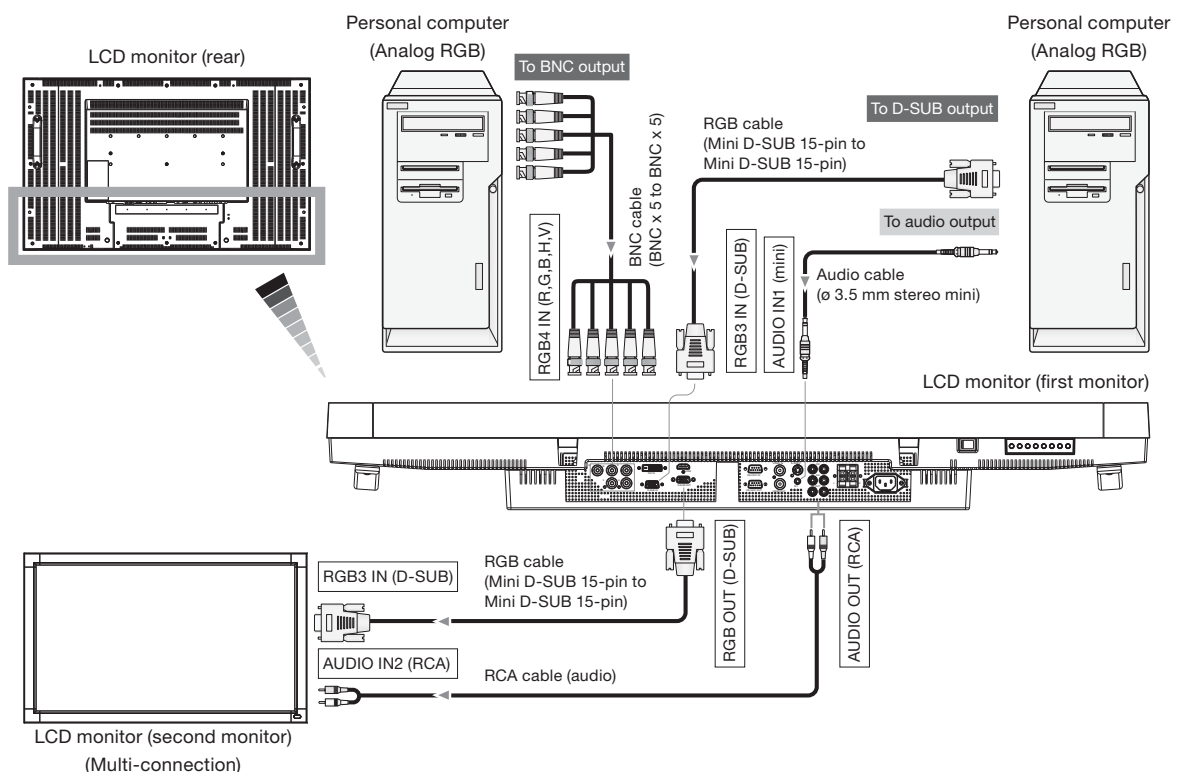
- (1) Use a BNC cable (BNC x 5 - BNC x 5) (commercially available) to connect the BNC connector on the PC, and use a signal cable (mini D-SUB 15-pin - BNC x 5) (commercially available) to connect the mini D-SUB 15-pin connector on the PC.
- (2) Select [RGB4] using the INPUT button on the monitor or the BNC button on the wireless remote control.

Second monitor connection:

- Connect the RGB OUT connector (mini D-SUB 15-pin) on the first monitor and the RGB3 IN connector (mini D-SUB 15-pin) on the second monitor using an RGB cable (mini D-SUB 15-pin - mini D-SUB 15-pin) (an accessory of the second monitor or commercially available).
- (The RGB3 or RGB4 signal selected by the first monitor is output. The RGB1 or RGB2 signal isn't output.)

Audio connection:

- Connect an audio cable (ø3.5 mm stereo mini) (commercially available) to the AUDIO IN1 connector. Select [AUDIO1] using the AUDIO INPUT buttons on the wireless remote control.
- To output audio to the second monitor:
Connect the AUDIO OUT connector on the first monitor and the AUDIO IN2 or 3 connector on the second monitor using an RCA cable (audio) (commercially available).



P-4 Connection procedure (continued)

Connecting with a computer (digital connection)

Digital connection:

- **Connection via the RGB1 IN connector (HDMI)**
 - (1) Connect an HDMI cable (commercially available) to the RGB1 IN connector.
 - (2) Select [RGB1] using the INPUT button on the monitor or the HDMI button on the wireless remote control.
- **Connection via the RGB2 IN connector (DVI-D)**
 - (1) Connect a DVI-D cable (commercially available) to the RGB2 IN connector.
 - (2) Select [RGB2] using the INPUT button on the monitor or the DVI-D button on the wireless remote control.

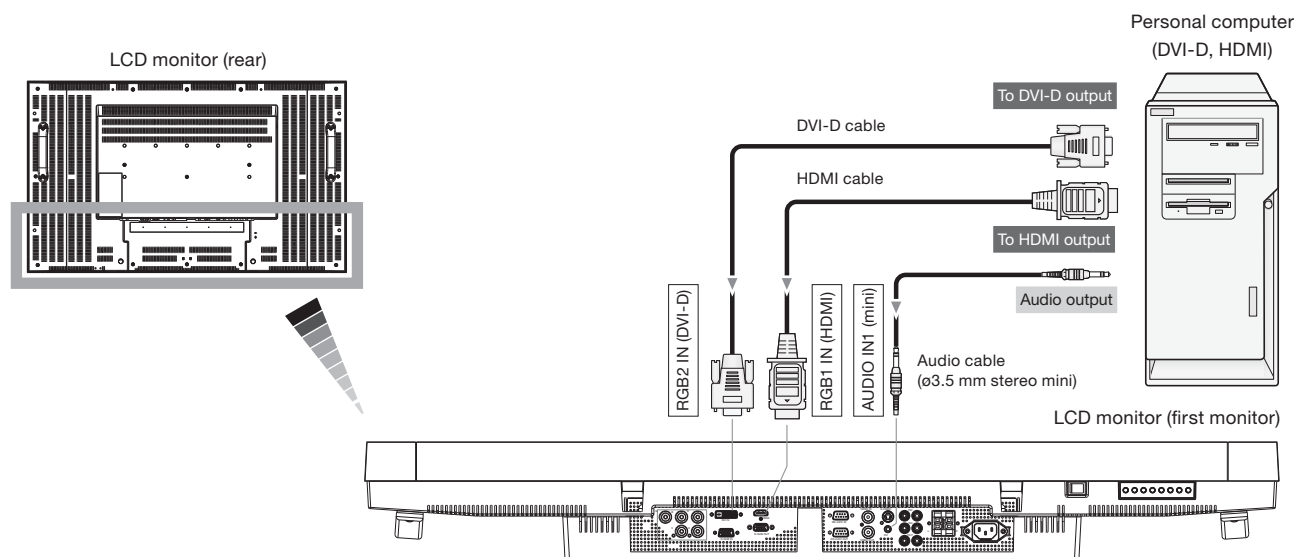
Audio connection:

- **Connect an audio cable (ø3.5 mm stereo mini) (commercially available) to the AUDIO IN1 connector.**

Select [AUDIO1] using the AUDIO INPUT buttons on the wireless remote control.

When an HDMI cable is connected, select HDMI audio.

(You can select HDMI only when the video input is [RGB1].)



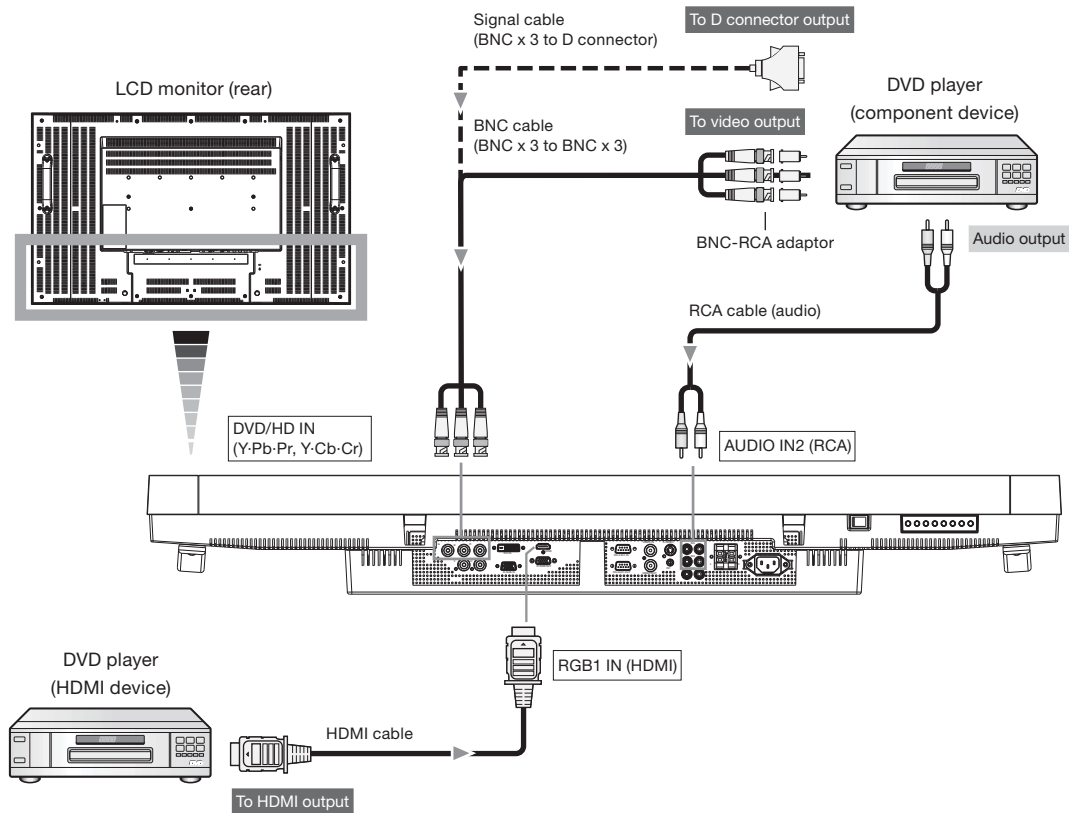
P-4 Connection procedure (continued)

Connecting a video device (component video/HDMI device)

This monitor can be connected to a video device equipped with component output such as a DVD player.

Refer to the user's manual of the connected device for details. (Cables shown in the figure below are commercially available.)

- To connect a DVD player equipped with component output to the DVD/HD IN connector (YPbPr or YCbCr) on the monitor, use a BNC cable (BNC x 3 – BNC x 3) and a BNC-RCA adaptor (commercially available), or a signal cable (BNC x 3 – D connector). Select [DVD/HD] using the INPUT button on the monitor or the YPbPr button on the wireless remote control.
 - To make audio connection, connect an RCA cable (audio) to the AUDIO IN2 connector or the AUDIO IN3 connector. Select [AUDIO2] or [AUDIO3] using the AUDIO INPUT buttons on the wireless remote control.
 - To connect a DVD player equipped with HDMI output to the RGB1 IN connector (HDMI) on the monitor, use an HDMI signal cable. Select [RGB1] using the INPUT button on the monitor or the HDMI button on the the wireless remote control.
 - For HDMI cable connection, select HDMI audio.
- (You can select HDMI audio only when the video input is [RGB1].)



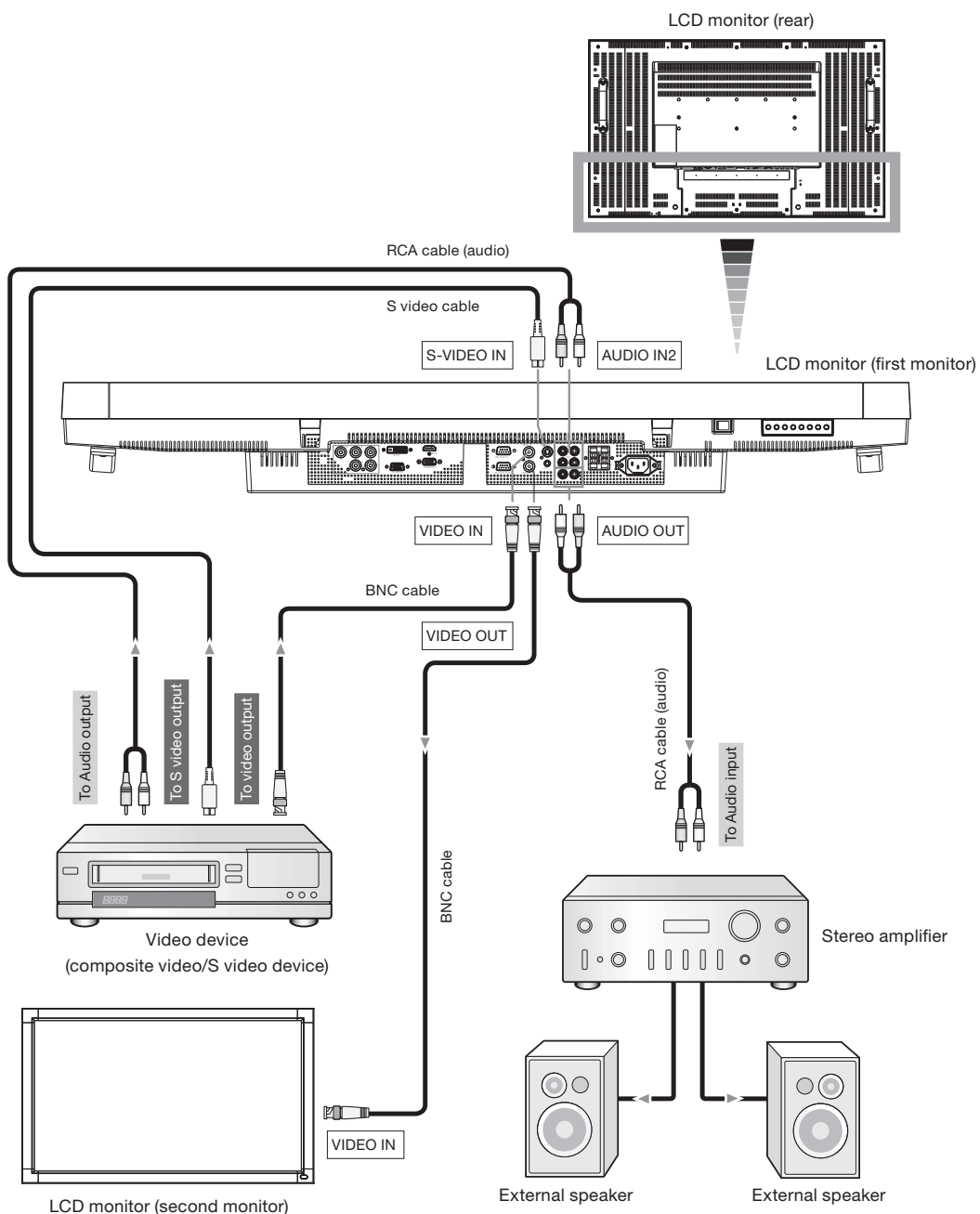
P-4 Connection procedure (continued)

Connecting a video device (composite video/S video device)/stereo amplifier

This monitor can be connected to a stereo amplifier.

Refer to the user's manual of the stereo amplifier for details. (Cables shown in the figure below are commercially available.)

- To connect a video device to the VIDEO IN connector (VIDEO IN or S-VIDEO IN) on the monitor, use a BNC cable or an S video cable. For connection to the audio input connector on the monitor, use an RCA cable (audio cable). Connect the connectors of the RCA cable (audio) correctly. For connection to the VIDEO IN connector, select [VIDEO] using the INPUT button on the monitor or the VIDEO button on the wireless remote control. For connection to the S-VIDEO IN connector, select [VIDEO<S>] using the INPUT button on the monitor or the VIDEO(S) button on the wireless remote control.
- When connecting a stereo amplifier to the monitor, be sure to turn off the power of the stereo amplifier. For connection to the audio output connector on the monitor, use an RCA cable (audio). Connect the connectors of the RCA cable (audio) correctly. Be sure to turn on the monitor first, and then turn on the stereo amplifier.
- The selected audio input signal is output from the AUDIO OUT connector.



P-5

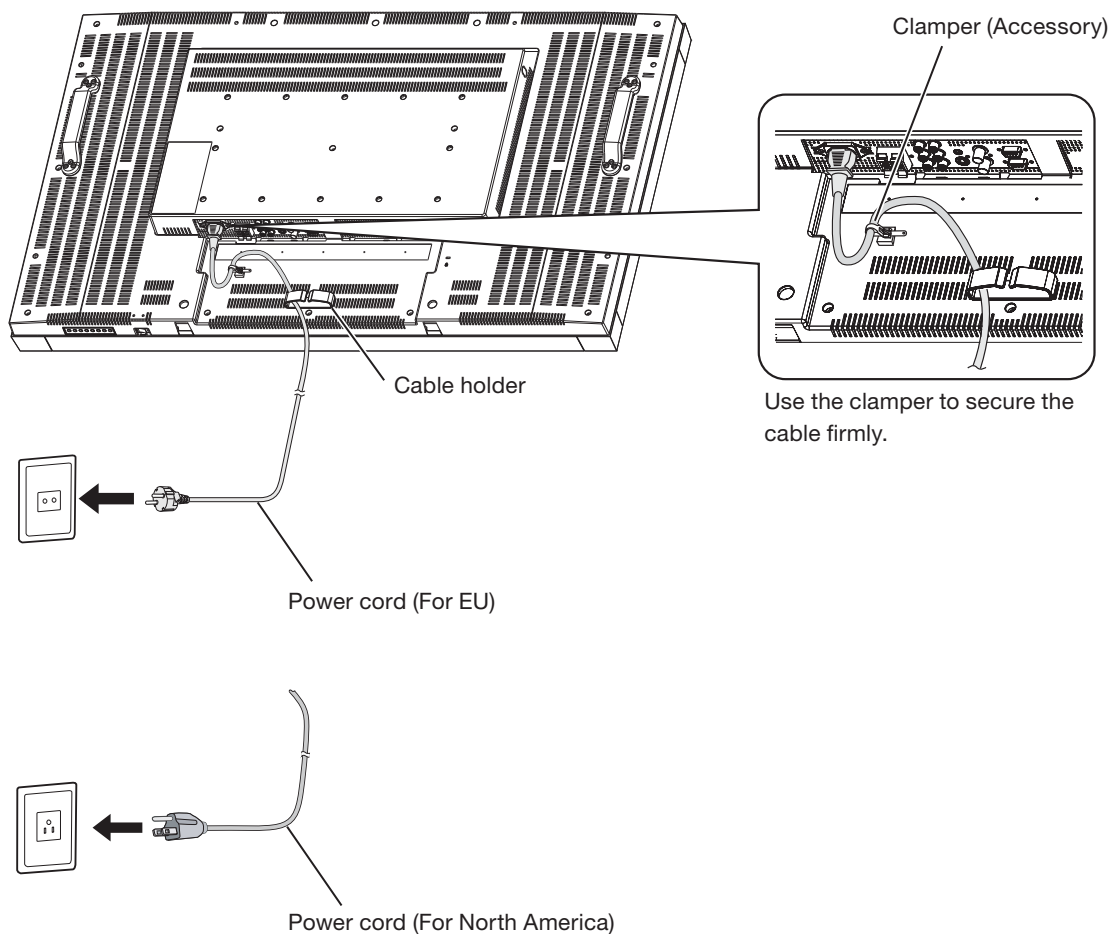
Connecting the power cord to the monitor

Connecting the power source

- The power outlet socket should be installed as near the equipment as possible and should be easily accessible.
- Fully insert the prongs into the power outlet socket.
Loose connection may cause noise.

NOTE:

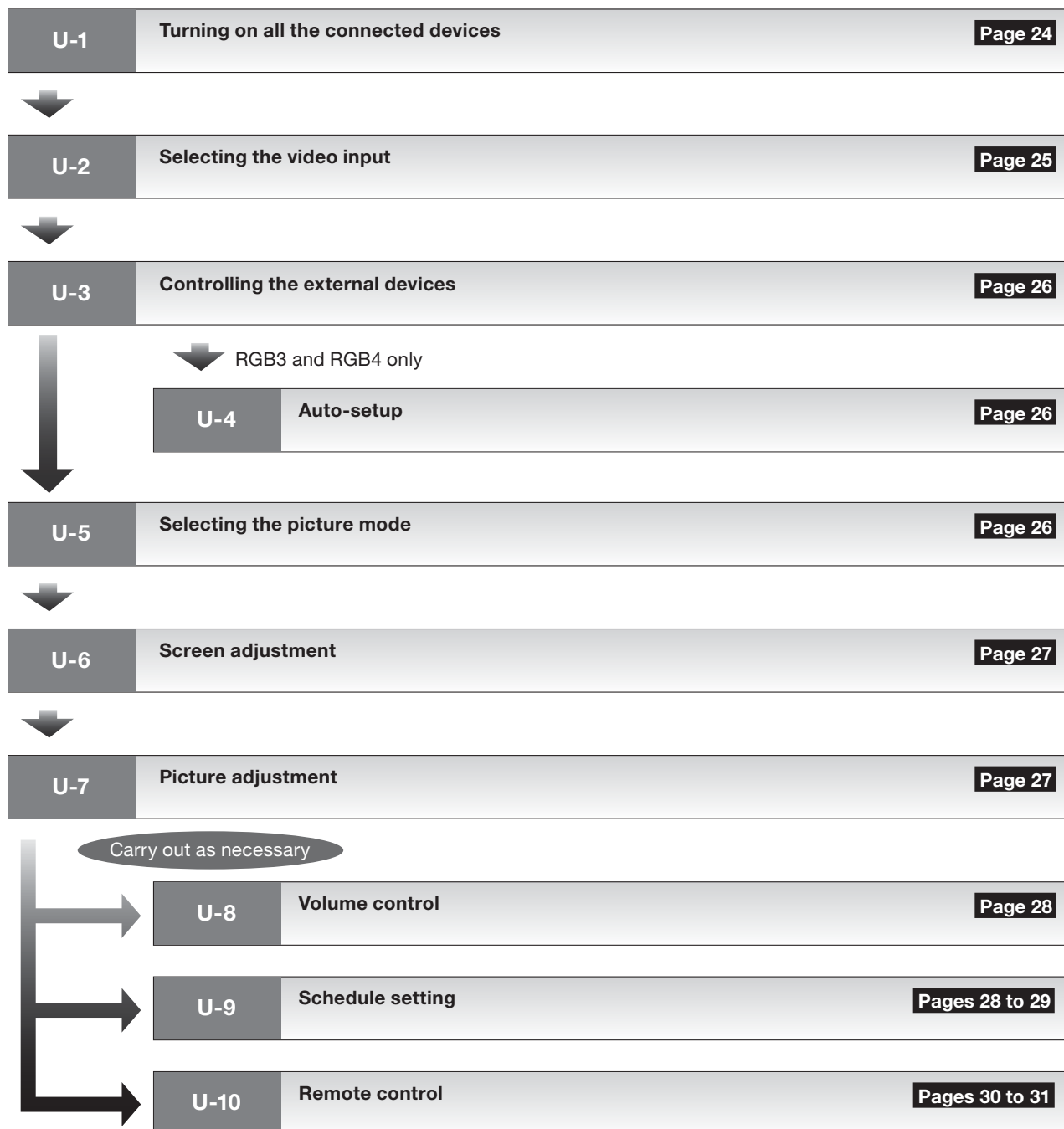
Please refer to "Safety Precautions, Maintenance & Recommended Use" in this manual for proper selection of the AC power cord.



How to Use

Flow of How to Using

English



U-1 Turning on all the connected devices

Turning on external devices

1. Turn on the connected devices such as the computer and VCR.

Before turning on the monitor, turn on the computer.

Turning on the monitor

2. Turn on the Main Power Switch.

The power indicator turns on green.

The control buttons on the bottom of the monitor and the wireless remote control don't work while the Main Power Switch is off (the power indicator is off).

When using them, check that the Main Power Switch is on (the power indicator is on).

3. When the power indicator glows red, press the POWER button on the monitor.

The power indicator turns green.

Power Management Function

This function reduces the power consumption of the monitor when the keyboard or the mouse is not used for a fixed period even though the power of the monitor is on.

While this function is working, the screen becomes dark and the power indicator glows green and red.

This function is available only when a computer equipped with the VESA-approved DPM Power Management function is connected to the monitor.

Check that the power management function (power saver) for RGB is ON.

When you turn on this function for VIDEO, the monitor goes into the sleep mode in 10 minutes after RGB4, DVD/HD, VIDEO<S>, or VIDEO sync signal is lost.

[Description]

DPM: Acronym for Display Power Management

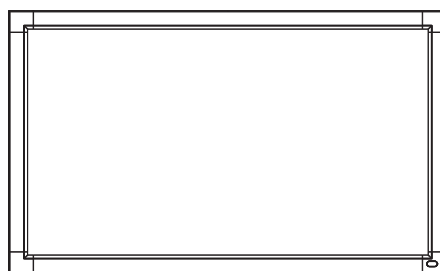
NOTE:

The default power management settings (power savers) for RGB and VIDEO are ON.

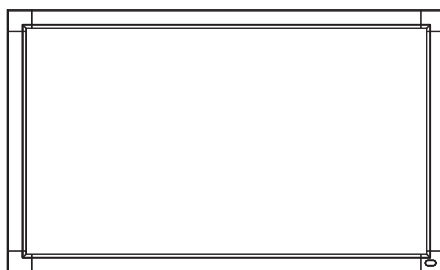
Power Indicator

Status	LED
Power ON	Green
Power OFF	Red
Power Standby when "SCHEDULE" is enable	Red On Green Blinking
Power Standby	Red, Green
Diagnosis (Detecting failure)	Red Blinking

* See troubleshooting on page 44.

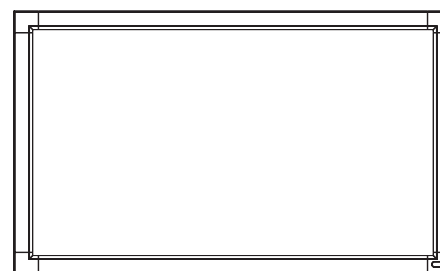


Main Power Switch



or

Power button



Power button



Wireless remote control

U-2 Selecting the video input

You can select the desired video input using the wireless remote control or the INPUT button on the monitor.

1. Select using the INPUT buttons on the wireless remote control.

You can select the desired video input by pressing the corresponding INPUT button on the wireless remote control.

Selectable video inputs are [RGB1] (HDMI), [RGB2] (DVI-D), [RGB3] (D-SUB), [RGB4] (BNC), [DVD/HD] (YPbPr), [VIDEO<S>] (VIDEO(S)), and [VIDEO] (VIDEO).

NOTE:

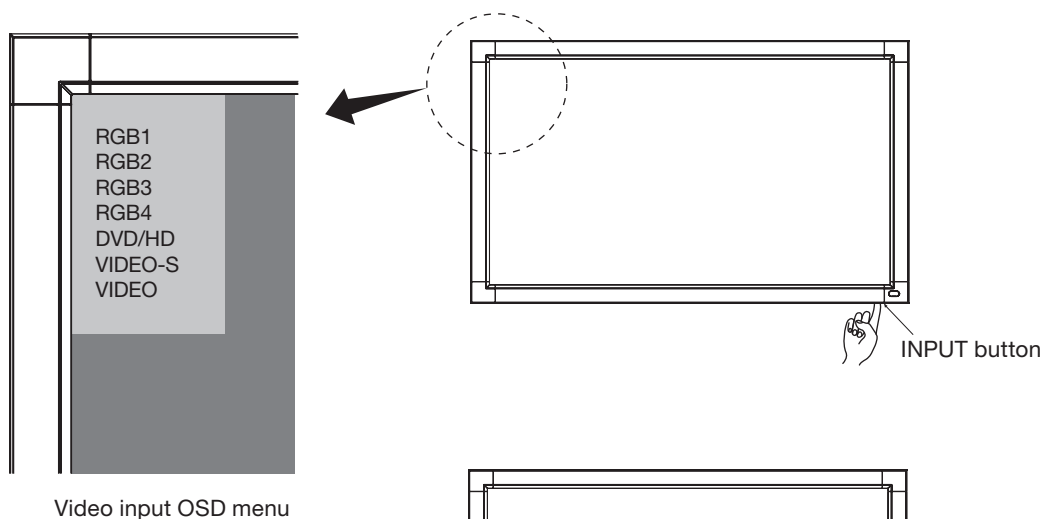
The [CAT5] and [DISPLAY PORT] buttons don't work.



2. Select using the INPUT button on the monitor.

When you press the INPUT button on the monitor, the video input OSD menu is displayed and you can select the video input using the ▲ and ▼ buttons.

Selectable video inputs are [RGB1] (HDMI), [RGB2] (DVI-D), [RGB3] (D-SUB), [RGB4] (BNC), [DVD/HD], [VIDEO-S], and [VIDEO].

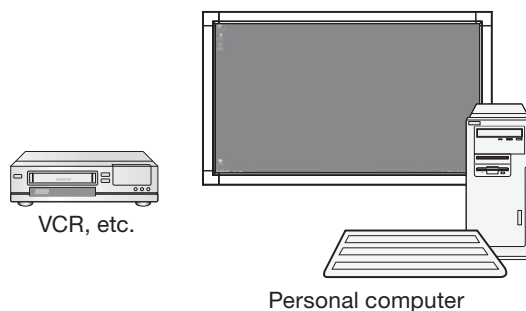


Video input OSD menu

Select using the ▲ and ▼ buttons.

U-3 Controlling the external devices

You can control the externally connected devices to display images supplied from them.



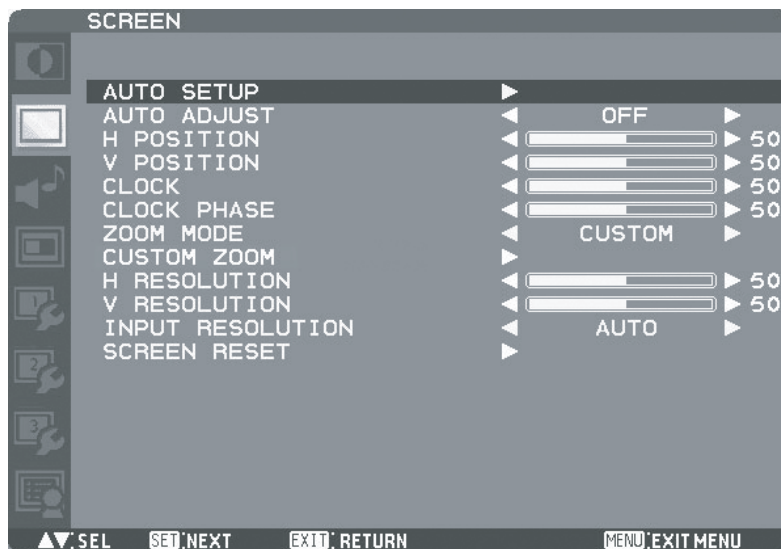
U-4 Auto-setup

Analog inputs only

The AUTO SETUP button on the wireless remote control or AUTO SETUP in the OSD menu automatically adjusts the screen size, horizontal/vertical position, clock, clock phase, white level, and black level.

NOTE:

The auto setup works on RGB3 and RGB4 only.



U-5 Selecting the picture mode

Using the PICTURE MODE button on the wireless remote control, you can select the picture mode suitable for images to be displayed.



- HIGHBRIGHT: The brightness is maximized.
STANDARD: Factory default setting.
sRGB: Suitable for color matching with sRGB-compliant devices.
CINEMA: Suitable for viewing movies.

U-6 Screen adjustment

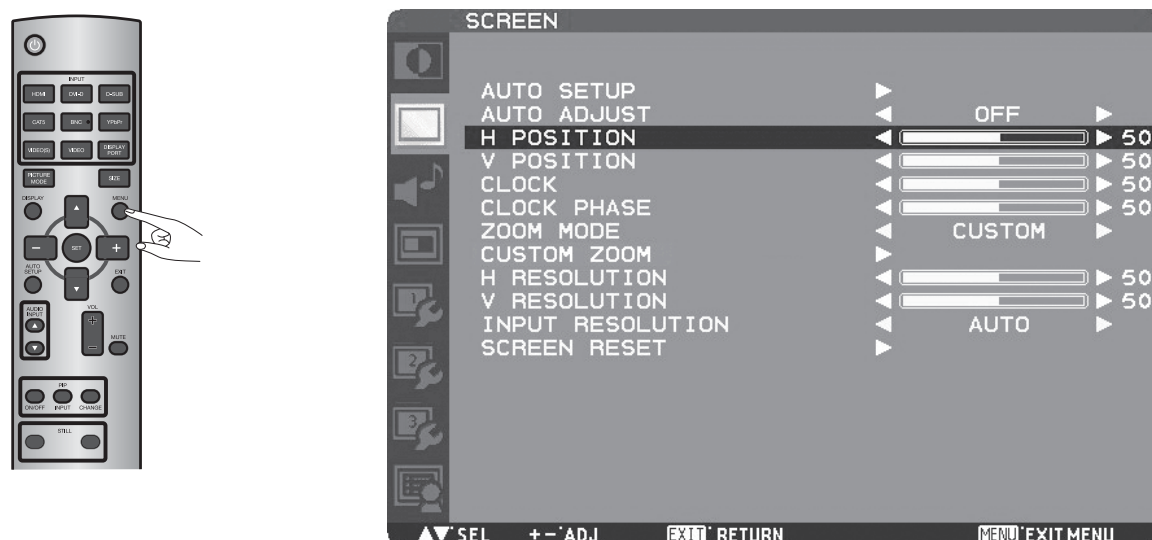
When images aren't displayed properly even after the auto setup, you can alternatively adjust the screen by pressing the MENU button on the wireless remote control or the control buttons on the bottom of the monitor to display the OSD menu. Using the SCREEN settings in the OSD menu, you can adjust the horizontal/vertical position, clock, clock phase, CUSTOM ZOOM, horizontal resolution, vertical resolution, and input resolution.

NOTE:

The position adjustment works on RGB3, RGB4, DVD/HD, VIDEO<S>, and VIDEO only.

The clock adjustment and the resolution adjustment work on RGB3 and RGB4 only.

The zoom adjustment works on all video inputs.



U-7 Picture adjustment

You can adjust the picture by pressing the MENU button on the wireless remote control or the control buttons on the bottom of the monitor to display the OSD menu. Using the PICTURE settings in the OSD menu, you can adjust picture settings such as the brightness, contrast, and sharpness.



U-8 Volume control

Carry out as necessary

When outputting audio from the option stereo speakers, you can control the volume level using the VOL button on the wireless remote control.

In addition, you can adjust the volume by pressing the MENU button on the wireless remote control or the control buttons on the bottom of the monitor to display the OSD menu. Using the AUDIO settings in the OSD menu, you can adjust the balance, treble, and bass.



Volume control



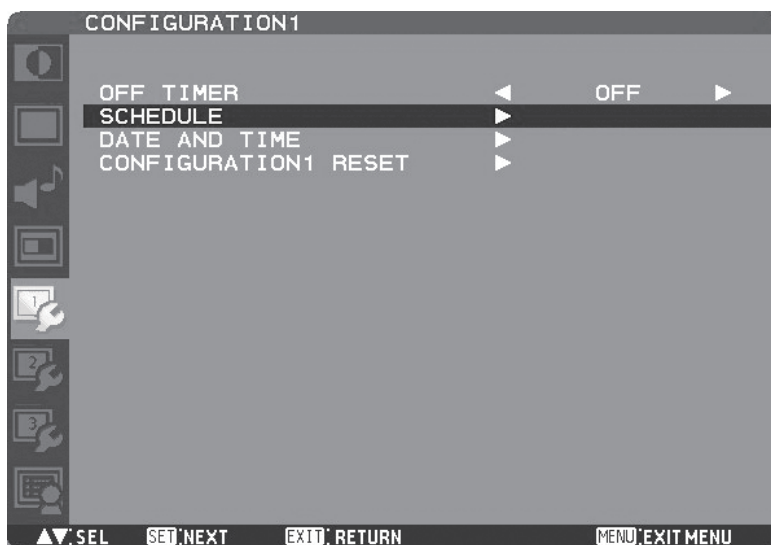
Displaying the OSD menu



U-9 Schedule setting

Carry out as necessary

You can program the power-on/off and input selection using the SCHEDULE setting in the OSD menu that is displayed by pressing the MENU button on the wireless remote control or the control buttons on the bottom of the monitor.



How to set up schedule



When the cursor is on any of the check boxes showing the program numbers 1 to 7 on the left side of the screen, pressing the UP (▲) or DOWN (▼) button moves the cursor vertically and pressing the PLUS (+) or MINUS (-) buttons moves it horizontally. By pressing the SET button, you can select or deselect the check boxes.

Check box: When the check box is selected, the program is enabled. When it is cleared, the program is disabled. When the SCHEDULE screen is closed, the programs you made become enabled and will be executed at the specified times.

When the cursor is on any item of the schedule settings in the white frame, pressing the PLUS (+) button moves it to the right and pressing the MINUS (-) button moves it to the left.

You can set the power-on/off time and video input by pressing the UP (▲) or DOWN (▼) button. You can select or deselect the radio buttons by pressing the SET button.

- ON:** Set the time when the power is turned on. If you don't want to set the power-on time, enter "--."
- OFF:** Set the time when the power is turned off. If you don't want to set to the power-off time, enter "--."
- INPUT:** Set the video input to be selected when the power is turned on. If you want to select the vide input that was selected before the power is turned on, enter "--."
- EVERY DAY:** Select this option to execute the schedule every day. When you select EVERY DAY, you cannot select any days of the week and EVERY WEEK.
- MON - SUN:** Select the days of the week on which you want to execute the schedule. Unless you select EVERY WEEK, too, the selection of the days of the week is cleared after the schedule is executed one time.
- EVERY WEEK:** Select this option to execute the schedule on the selected days of the week, every week.

NOTE:

- Before making the schedule settings, be sure to check the current date and time using "DATE AND TIME."
- When you close the SCHEDULE screen, the settings are saved.
- When two or more schedules are enabled, they are executed in descending order of the program number, and the power is turned off upon completion of the last executed schedule.
- When there are two or more schedules having the same power-on/off time, the one having the largest program number is executed.
- You cannot set the power-on time and the power-off time to the same time.
- When OFF TIMER is ON, the schedule settings are ignored.

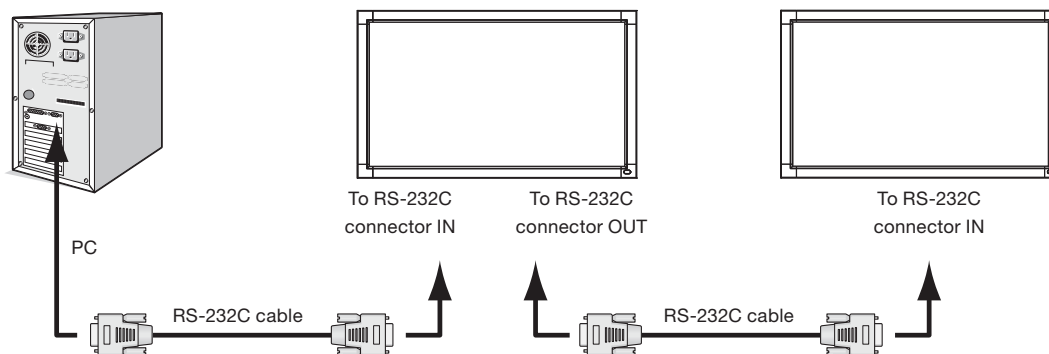
RS-232C Remote control

By connecting multiple LCD monitors and a computer using RS-232C cables (commercially available), you can control the monitors from the computer for the following operations:

- Power ON or OFF
- Switching input signals

Connection

LCD monitor + PC



- Before making connections, turn off the personal computer and the monitors.
- Start the personal computer first, and then turn on the monitors. (Otherwise, the com port may be unusable.)

NOTE:

For connection with a 25-pin serial port connector on the computer, a conversion adapter is required. Contact your dealer for details.

1) Interface

PROTOCOL	RS-232C
BAUD RATE	9600 [bps]
DATA LENGTH	8 [bit]
PARITY BIT	NONE
STOP BIT	1 [bit]
FLOW CONTROL	NONE

This LCD monitor uses RXD, TXD and GND lines for RS-232C control.

Use RS-232C cables of reverse type (commercially available).

2) Control command diagram

The command is structured by the address code, function code, data code and end code. The length of the command is different for each function.

NOTE:

The example below shows basic commands used for the configuration consisting of one computer and one monitor (one-to-one connection). For the commands for connecting multiple monitors, contact your dealer.

	Address code	Function code	Data code	End code
HEX	30h 30h	Function	Data	0Dh
ASCII	'0' '0'	Function	Data	↵

[Address code] 30h 30h (ASCII code, '0' '0'), fixed.

[Function code] Code unique to each control function.

[Data code] Data unique to each control function (Not always indicated by numerical values.)

[End code] 0Dh (In ASCII code, '↵') fixed.

3) Control sequence

- (1) A command is sent from the computer to the monitor. (Commands should be sent at intervals of at least 600 ms.)
- (2) The monitor sends a return command within 600 ms* after receiving and encoding the command. If the monitor fails to receive the command, it doesn't send any return command.
- (3) The computer checks the return command to see that the command it sent was executed or not.
- (4) The monitor sends various codes other than the return code. While RS-232C control sequence is in progress, reject other codes on the personal computer side.

*: Transmission of the return command may be delayed during signal switchover, etc.

Example: Turn the power ON (' ' is for ASCII code)

Command from computer	Command from monitor	Detail of command
30 30 21 0D '0' '0' '!' '↵'		Command for POWER ON
	30 30 21 0D '0' '0' '!' '↵'	Command received (Command echoed back)

4) Operation commands

The operation commands configure the basic operation settings of this LCD monitor. The commands may not work during signal switchover.

The operation commands have no data codes.

Operation	ASCII	HEX
POWER ON	!	21h
POWER OFF	"	22h
INPUT RGB 1	_r1	5Fh 72h 31h
INPUT RGB 2	_r2	5Fh 72h 32h
INPUT RGB 3	_r3	5Fh 72h 33h
INPUT RGB 4	_r4	5Fh 72h 34h
INPUT VIDEO	_v1	5Fh 76h 31h
INPUT DVD/HD	_v2	5Fh 76h 32h
INPUT S-VIDEO	_v3	5Fh 76h 33h

- After sending the POWER ON or POWER OFF command, wait for at least 1 minute to send the next command.
- After sending any of the video input selection commands, wait for at least 10 seconds to send the next command.

5) Read command

The computer sends the command without datacode to the monitor.

After receiving this command, the monitor returns the command with datacode including the current status to the computer.

Example: When the computer asks the power status of the monitor, and the status of the monitor is powered-on.

Command from computer	Command from monitor	Detail of command
30 30 76 50 0D '0''0''v''P'[enter]		Ask about the power status of the monitor.
	30 30 76 50 31 0D '0''0''v''P''1'[enter]	Monitor is powered-on.

Structure of the Read-command

			ASCII		HEX	
			Function	Data (Receive)	Function	Data (Receive)
POWER	ON		vP	1	76 50	31
	OFF (stand by)		vP	0	76 50	30
Input	RGB-1 (HDMI)		vl	r1	76 49	72 31
	RGB-2 (DVI-D)		vl	r2	76 49	72 32
	RGB-3 (D-SUB)		vl	r3	76 49	72 33
	RGB-4 (BNC)		vl	r4	76 49	72 34
	Video		vl	v1	76 49	76 31
	DVD/HD		vl	v2	76 49	76 32
	S-VIDEO		vl	v3	76 49	76 33
Picture mode	HIGHBRIGHT		vM	p1	76 4D	70 31
	STANDARD		vM	p2	76 4D	70 32
Internal temperature	Around the main board	Resolution 1°C	tc1	(ex.) +25	74 63 31	2B 20 32 35
	Around the power supply	Resolution 1°C	tc2	(ex.) +31	74 63 32	2B 20 33 31

Configuration and basic operation of OSD screen

Configuration of OSD screen

This monitor is equipped with the OSD (On Screen Display) function for easy screen adjustment. The OSD function allows you to control the menus displayed on the screen for brightness setting and other settings. The OSD screen is configured as shown below.

Main Menu Screen

Sub menu (Adjustment items)
Adjustment items are displayed.

Adjustment status
The values adjusted by the wireless remote control and the PLUS and MINUS buttons on the monitor are displayed.

The main OSD menu is titled "PICTURE". It lists the following adjustment items: BRIGHTNESS, CONTRAST, SHARPNESS, BLACK LEVEL, TINT, COLOR, COLOR TEMPERATURE, GAMMA SELECTION, NOISE REDUCTION, FILM MODE, and PICTURE RESET. To the right of these items are horizontal sliders for BRIGHTNESS, CONTRAST, SHARPNESS, and BLACK LEVEL, each with a value of 50. Below these sliders are three more settings: 6500K, NATIVE, and OFF, with an arrow pointing to the right. At the bottom of the menu is a "PICTURE RESET" option. The bottom of the screen displays navigation buttons: "SEL", "ADJ", "EXIT", "RETURN", and "MENU", "EXIT MENU".

Operation buttons (Key guide)
Buttons for controlling the displayed OSD menu are displayed.

Main menu
Icons other than the one you selected are grayed out.

	PICTURE	Page 34		CONFIGURATION1	Page 38
	SCREEN	Page 35		CONFIGURATION2	Page 39
	AUDIO	Page 36		CONFIGURATION3	Page 40
	PIP	Page 37		ADVANCED OPTION	Page 41

Sub menu screen

When you select a sub menu, an OSD screen is displayed. Sub menus contain information screens, adjustment menu screens, and selection menu screens as shown below.

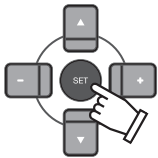
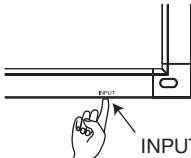
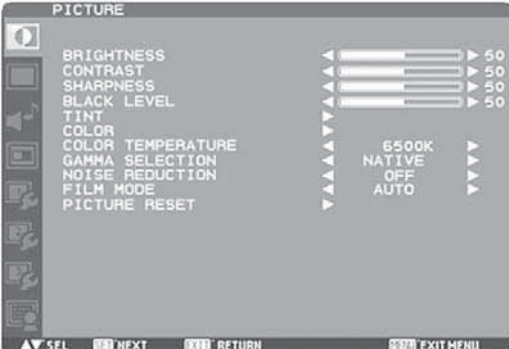
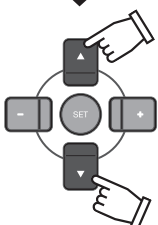
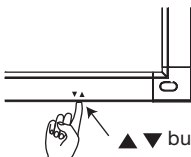
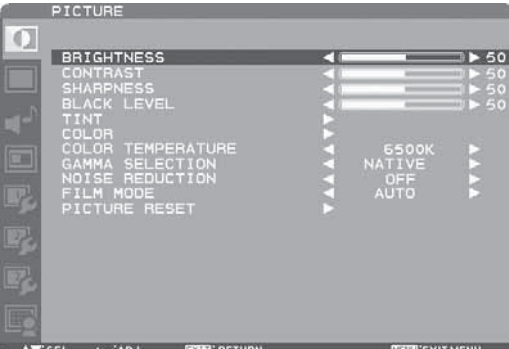
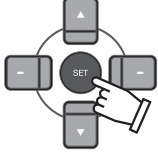
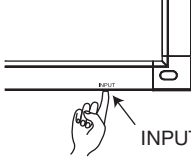
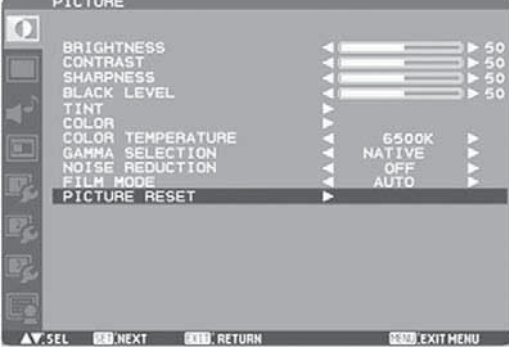
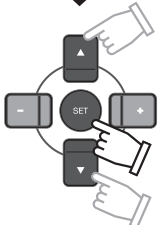
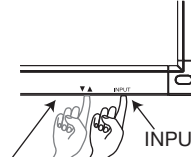
Sub menu screen: Picture reset (for example)

The sub menu screen for "PICTURE RESET" shows two options: "NO" and "YES". The bottom of the screen displays navigation buttons: "SEL", "SET", "SET", "EXIT", "RETURN", and "MENU", "EXIT MENU".

Configuration and basic operation of OSD screen (continued)

Basic operation of OSD

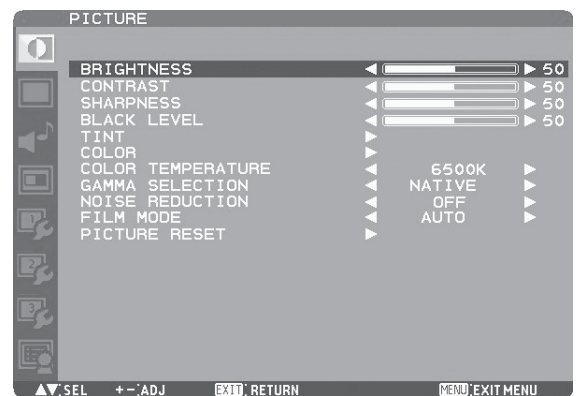
When the MENU button on the wireless remote control or the EXIT button on the monitor is pressed, the OSD screen is displayed. Select a main menu by pressing the ▲ or ▼ button.

Wireless remote control	Monitor button	OSD screen
 Accept the selected main menu by pressing the SET button.	 INPUT button Select a main menu by pressing the INPUT button.	
 Select a sub menu by pressing the ▲ or ▼ button.	 ▲ ▼ button Select a sub menu by pressing the ▲ or ▼ button.	
 Accept the selected sub menu by pressing the SET button.	 INPUT button Accept the selected sub menu by pressing the INPUT button.	
 Select the setting value by pressing the ▲ or ▼ button and then press the SET button to accept the setting.	 ▲ ▼ button INPUT button Select the setting value by pressing the ▲ or ▼ button and then press the INPUT button to accept the setting.	

The OSD screen disappears when you press the MENU button on the wireless remote control once or the EXIT button on the monitor three times.

OSD screen functions

PICTURE



■ BRIGHTNESS

You can adjust the brightness.

Press the PLUS (+) button to increase the brightness. Press the MINUS (-) button to decrease the brightness.

■ CONTRAST

You can adjust the contrast.

Press the PLUS (+) button to brighten dark areas in the image. Press the MINUS (-) button to darken bright areas in the image.

■ SHARPNESS

You can adjust the sharpness.

Press the PLUS (+) button to make the image look sharper. Press the MINUS (-) button to make the image look softer.

NOTE : If you increase the sharpness setting value too much, lines may appear double. In such a case, decrease the sharpness setting value.

■ BLACK LEVEL

You can adjust the brightness at the blackest point in the image. Press the PLUS (+) button to brighten dark areas in the image. Press the MINUS (-) button to darken bright areas in the image.

NOTE : This adjustment doesn't work in the sRGB picture mode.

■ TINT

* For the RGB1, DVD/HD, VIDEO<S>, and VIDEO inputs only.

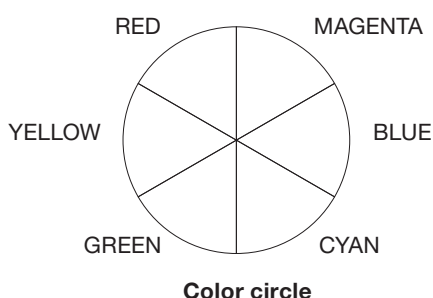
When you select TINT by pressing the SET button on the wireless remote control, the TINT screen appears and you can adjust the following.

[TINT]:

You can adjust all the colors at the same time. Press the PLUS (+) button to add a green tint. Press the MINUS (-) button to add a purple tint.

[RED], [MAGENTA], [BLUE], [CYAN], [GREEN], or [YELLOW]:

You can adjust each color individually. Press the PLUS (+) button to shift the selected color to the right around the color circle. Press the MINUS (-) button to shift the selected color to the left around the color circle.



Color circle

■ COLOR

* For the RGB1, DVD/HD, VIDEO<S>, and VIDEO inputs only.

When you select COLOR by pressing the SET button on the wireless remote control, the COLOR screen appears and you can adjust the following.

[COLOR]:

You can adjust all the colors at the same time. Press the PLUS (+) button to deepen the colors. Press the MINUS (-) button to lighten the colors.

[RED], [MAGENTA], [BLUE], [CYAN], [GREEN], or [YELLOW]:

You can adjust each color individually. Press the PLUS (+) button to deepen the selected color. Press the MINUS (-) button to lighten the selected color.

NOTE : This adjustment doesn't work in the sRGB picture mode.

■ COLOR TEMPERATURE

You can adjust the color temperature.

The image becomes reddish as the color temperature decreases, and it becomes bluish as the color temperature increases.

NOTE : This adjustment doesn't work in the sRGB picture mode.

■ GAMMA SELECTION

You can select the gamma mode from NATIVE, S GAMMA, 2.2, 2.4 and OPTION.

NOTE : GAMMA is fixed to 2.2 in the sRGB picture mode.

■ NOISE REDUCTION

* For the VIDEO<S> and VIDEO inputs only.

You can adjust the noise reduction level.

Press the PLUS (+) button to increase the value to lessen the noise.

■ FILM MODE

You can select the film mode function.

AUTO: Images of 24 frames per second are automatically detected and displayed.

OFF: Images of 24 frames per second are not automatically detected.

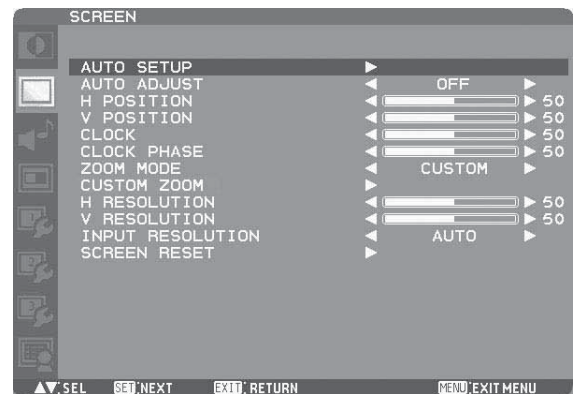
NOTE : When FILM MODE is AUTO, set SCAN CONVERSION to PROGRESSIVE. See page 41.

■ PICTURE RESET

You can reset all the PICTURE settings to the factory defaults.

OSD screen functions (continued)

SCREEN



English

■ AUTO SETUP

* For the RGB3 and RGB4 inputs only.

Press the SET button to automatically adjust the screen size, horizontal position, vertical position, clock, clock phase, white level, and black level.

■ AUTO ADJUST

* For the RGB3 and RGB4 inputs only.

When AUTO ADJUST is ON, the horizontal position, vertical position, and clock phase are automatically adjusted at the time of the timing switching.

■ H POSITION

You can adjust the horizontal image position.

Press the PLUS (+) button to move the image to the right.

Press the MINUS (-) button to move the image to the left.

■ V POSITION

You can adjust the vertical image position.

Press the PLUS (+) button to move the image up. Press the MINUS (-) button to move the image down.

■ CLOCK

* For the RGB3 and RGB4 inputs only.

You can adjust the image size of the computer and eliminate blurred letters.

Press the PLUS (+) button to expand the width of the image on the screen to the right. Press the MINUS (-) button to narrow the width of the image on the screen to the left.

■ CLOCK PHASE

* For the RGB3 and RGB4 inputs only.

You can adjust the level of the periodic variation of the screen flicker.

■ ZOOM MODE

You can select the mode to stretch the image to fit it to the screen.

For the RGB1, RGB2, RGB3, and RGB4 inputs, you can select FULL, NORMAL, CUSTOM, or REAL.

For DVD/HD, VIDEO<S>, and VIDEO, you can select FULL, NORMAL, DYNAMIC, CUSTOM, or REAL.

FULL: The image is stretched to fill the screen regardless of its aspect ratio.

NORMAL: The image is stretched vertically to the full height of the screen while keeping the aspect ratio.

DYNAMIC: The image is stretched to fill the screen with different magnifications at the screen center and the screen edges.

CUSTOM: You can stretch the image horizontally and vertically as you desire using the CUSTOM ZOOM setting.

REAL: The image is displayed without being stretched or reduced.

NOTE : In the DYNAMIC mode, the top and the bottom of the image may be cropped. Full HD images are displayed as in the FULL mode.

■ CUSTOM ZOOM

CUSTOM ZOOM becomes selectable when you set ZOOM MODE to CUSTOM.

ZOOM: You can expand the horizontal and vertical sizes simultaneously.

H ZOOM: You can expand the horizontal size only.

V ZOOM: You can expand the vertical size only.

H POSITION: Pressing the PLUS (+) button moves the image to the right. Pressing the MINUS (-) button moves the image to the left.

V POSITION: Pressing the PLUS (+) button moves the image up. Pressing the MINUS (-) button moves the image down.

■ H RESOLUTION

* For the RGB3 and RGB4 inputs only.

Use this setting when AUTO SETUP and AUTO ADJUST cannot obtain the horizontal resolution of the image supplied from an external device.

Press the PLUS (+) button to increase the resolution of the input. Press the MINUS (-) button to decrease the resolution of the input.

■ V RESOLUTION

* For the RGB3 and RGB4 inputs only.

Use this setting when AUTO SETUP and AUTO ADJUST cannot obtain the vertical resolution of the image supplied from an external device.

Press the PLUS (+) button to increase the resolution. (The displayed image will shrink vertically.) Press the MINUS (-) button to decrease the resolution. (The displayed image will expand vertically.)

■ INPUT RESOLUTION

* For the RGB3 and RGB4 inputs only.

You can select the following resolutions according to the input signal: AUTO, 1024x768, 1280x768, 1360x768, 1400x1050, 1680x1050, 1600x1200, and 1920x1200. AUTO selects the resolution automatically.

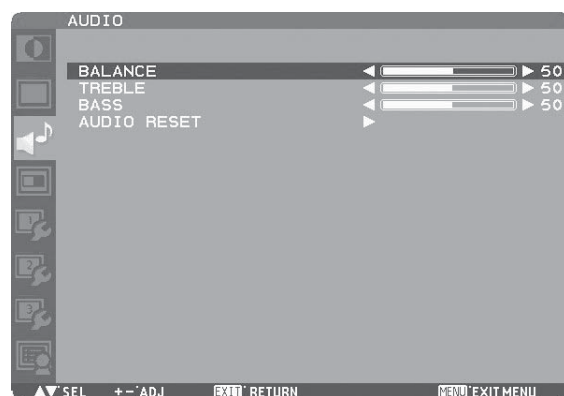
The setting you select becomes effective when POWER is turned OFF and ON again.

■ SCREEN RESET

You can reset all the SCREEN settings to the factory defaults.

OSD screen functions (continued)

AUDIO



■ BALANCE

You can adjust the balance of the right and left volumes.
Press the PLUS (+) button to decrease the left volume.
Press the MINUS (-) button to decrease the right volume.

■ TREBLE

You can adjust the high frequency sound.
Press the PLUS (+) button to increase the treble sound.
Press the MINUS (-) button to decrease the treble sound.

■ BASS

You can adjust the low frequency sound.
Press the PLUS (+) button to increase the bass sound.
Press the MINUS (-) button to decrease the bass sound.

■ AUDIO RESET

You can reset all the AUDIO settings to the factory defaults.

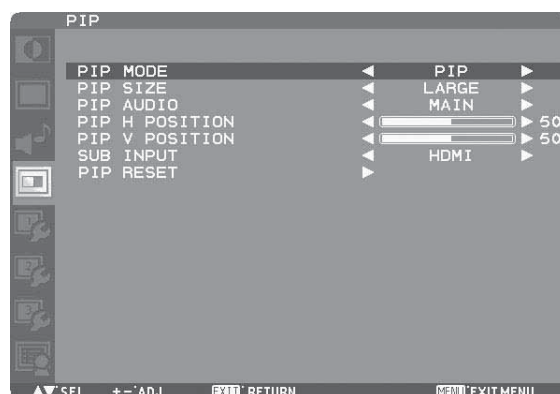
OSD screen functions (continued)

PIP (PICTURE IN PICTURE)

NOTE:

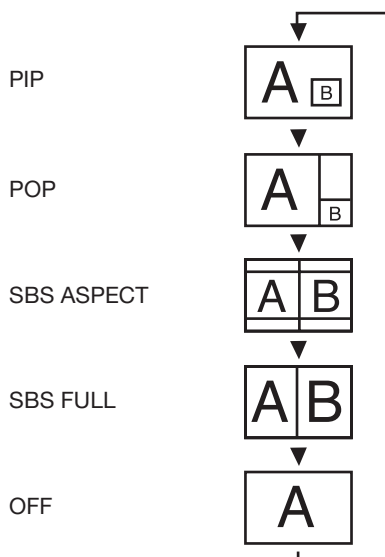
The PIP and POP functions don't work in the CUSTOM and REAL picture size modes.

Refer to "PIP, POP function" for details. (See page 43.)



■ PIP MODE

You can select the PIP mode from PIP, POP, SBS ASPECT, SBS FULL, and OFF using the PLUS (+) and MINUS (-) buttons. See page 43.



* SBS: SIDE BY SIDE

■ PIP SIZE

You can select the size of the sub picture displayed in the PIP mode.

You can move the sub picture by pressing the UP (▲), DOWN (▼), PLUS (+), and MINUS (-) buttons.

■ PIP AUDIO

You can select the audio output in the PIP mode.

When MAIN is selected, audio of the main picture is output.

When SUB is selected, audio of the sub picture is output.

■ PIP H POSITION

You can adjust the horizontal position of the sub screen.

Press the PLUS (+) button to move the sub screen to the right. Press the MINUS (-) button to move the sub screen to the left.

■ PIP V POSITION

You can adjust the vertical position of the sub screen.

Press the PLUS (+) button to move the sub screen up. Press the MINUS (-) button to move the sub screen down.

■ SUB INPUT

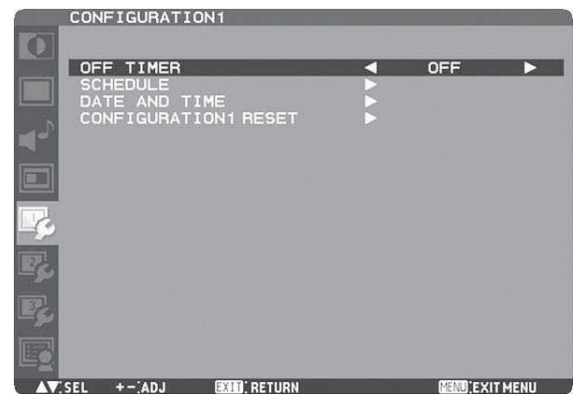
You can select the video input for the sub screen from HDMI (RGB1), DVI-D (RGB2), D-SUB (RGB3), RGB4, DVD/HD, VIDEO<S>, and VIDEO.

■ PIP RESET

You can reset all the PIP settings to the factory defaults.

OSD screen functions (continued)

CONFIGURATION1



■ OFF TIMER

You can select the OFF TIMER mode.

Select the time period to automatically turn off the power from 1 to 24 hours.

NOTE : When OFF TIMER is enabled, the SCHEDULE settings (see page 29) will be disabled.

■ SCHEDULE

You can program the LCD monitor operation schedules. (See page 29.)

< HOW TO SETUP SCHEDULE >

Using the “SCHEDULE” function allows you to set up to seven different scheduled time intervals when the LCD Monitor will be activated.

You can select the time the monitor turns on and turns off, the day of week the monitor is activated, and which input source the monitor will use for each scheduled activation period. A check mark in the box next to the number of the schedule indicates that the selected schedule is in effect. To select which schedule to set, use the up/down arrows to move the number (1 to 7) of the schedule.

Use the (+) and (-) buttons to move the cursor horizontally within the particular schedule. Use the ▲ and ▼ buttons to increase the time and select the input port. The “SET” button is used to make a selection.

If you create a schedule but do not want to set the power on time, select “--” in the “ON” time slot.

If you do not want to use a power off time select “--” in the “OFF” time slot.

If there is no input selected (“--” showing in the input spot) the input from the previous schedule will be used.

The selection of EVERY DAY within a schedule takes priority over other schedules that are set up to operate weekly.

When schedules are overlapping, scheduled Power ON time has priority over scheduled Power OFF time.

If there are two schedules programmed for the same time, then the highest numbered schedule has priority.

When OFF TIMER is enabled, the “SCHEDULE” settings are disabled.

■ DATE AND TIME

You can adjust the current date and time for the internal clock.

You must set this item when using SCHEDULE.

After completing the setting, be sure to press the SET button (button 5 on page 10).

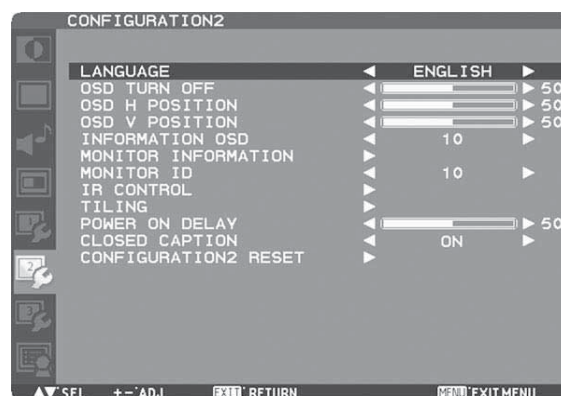
■ CONFIGURATION1 RESET

You can reset all the CONFIGURATION1 settings to the factory defaults.

Note that you cannot reset the setting of DATE AND TIME.

OSD screen functions (continued)

CONFIGURATION2



English

■ LANGUAGE

OSD control menus are available in eight languages. (English, German, Spanish, French, Italian, Swedish, Chinese, and Japanese)

■ OSD TURN OFF

The OSD control menu will stay on as long as it is used. The preset choices are 5 -120 seconds.

■ OSD H POSITION

You can adjust the horizontal position of the OSD menu.

■ OSD V POSITION

You can adjust the vertical position of the OSD menu.

■ INFORMATION OSD

You can enable and disable the information OSD display. The display time is selectable from 1 to 10 seconds.

NOTE : The information OSD display shows a message when the input source is switched, the input signal state is changed, or the input signal has an error.

■ MONITOR INFORMATION

The model name and the serial number of your monitor are displayed.

■ MONITOR ID

ID numbers for wireless remote control are assigned to LDT422V monitors that are multi-connected via RS-232C. ID numbers 1 to 26 are selectable.

■ IR CONTROL

You can lock the wireless remote control. Select from the following two modes using the ▲ and ▼ buttons and then determine the selected mode by pressing the SET button.

NORMAL: All the remote control operations are enabled.

LOCK: All the remote control operations are disabled.

NOTE: When you hold down the DISPLAY button on the wireless remote control for at least 5 seconds, the NORMAL mode is activated.

You can lock the wireless remote control independently from the control buttons on the bottom of the monitor. See page 42.

■ TILING

You can enlarge an image across multiple screens. A single large screen can be configured with up to 25 monitors. You can also divide the displayed image into up to 5 pieces horizontally and vertically.

NOTE : It is required to connect the same video signal to each monitor via a distributor or RGB OUT.

When TILING is activated, PIP, POP, SBS, and STILL are disabled.

TILING doesn't work in the REAL picture size mode.

H MONITORS: Select the number of images obtained by horizontal division.

V MONITORS: Select the number of images obtained by vertical division.

POSITION: Select the area you want to enlarge.

FRAME COMP.: When displaying an image across multiple monitors, you can select the mode to compensate for the bezel widths for smooth and natural display.

ENABLE: When you select ON, the image in the selected area is enlarged on the screen.

■ POWER ON DELAY

You can select the delayed time until the power-on mode is activated after the power is turned on manually or automatically. This setting is useful in hiding start-up messages and powering on the connected devices at different timings.

The time is selectable from OFF and 2, 4, 6, 8, 10, 20, 30, 40, and 50 seconds.

■ CLOSED CAPTION

You can select to display or hide captions.

OFF: Captions are hidden.

CC1: Captions are displayed in sync with the primary audio.

CC2: Information (related to the primary audio) is displayed without sync.

CC3: Captions are displayed in sync with the secondary audio.

CC4: Information (related to the secondary audio) is displayed without sync.

TT1/TT2/TT3/TT4: Four types of information not related to the displayed images are displayed. (For example, news and weather forecast.)

NOTE : Check with each supplier of your video software and external video devices in advance whether they are compliant with EIA-608-A.

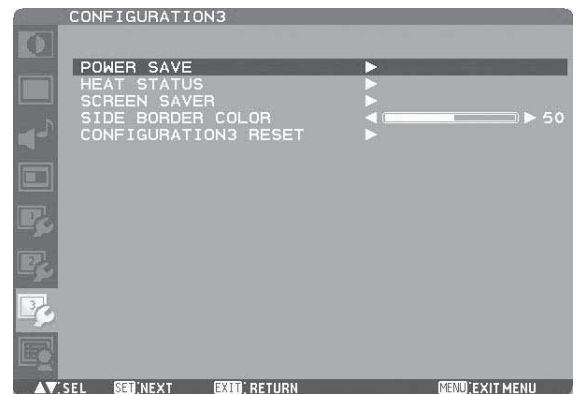
If their video signals are not compliant with it, images may not be displayed correctly.

■ CONFIGURATION2 RESET

You can reset all the CONFIGURATION2 settings to the factory defaults.

OSD screen functions (continued)

CONFIGURATION3



■ POWER SAVE

When you select ON, the power management function (power save) is activated.

When the RGB1, RGB2, RGB3, or RGB4 input is selected, the monitor goes into the sleep mode in several seconds after the sync signal is lost.

When the DVD/HD or VIDEO input is selected, the monitor goes into the sleep mode in about 10 minutes after the input signal is lost.

■ HEAT STATUS

The statuses of the cooling fan, brightness, and internal temperature are displayed.

NOTE : The cooling fan starts running according to the operating temperature or when COOLING FAN is ON in the SCREEN SAVER menu.

When the operating temperature substantially exceeds the operation guaranteed range, the message "TEMPERATURE WARNING!!" is displayed on the screen.

■ SCREEN SAVER

You can set the SCREEN SAVER functions to reduce the risk of "image persistence."

GAMMA:

When you select ON, the gamma mode where image persistence is difficult to occur is used.

COOLING FAN:

When you select ON, the cooling fan always runs.

When you select AUTO, the built-in fan automatically starts running according to the operating temperature.

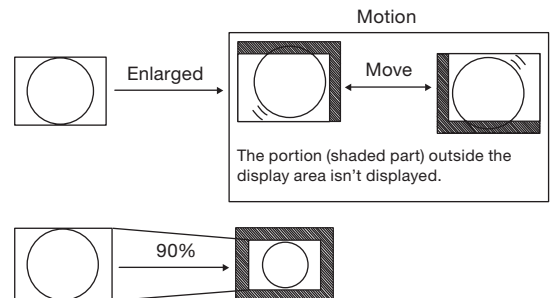
BRIGHTNESS:

When you select ON, the brightness decreases.

MOTION:

The screen slightly moves horizontally and vertically at regular intervals to reduce the effect of the image persistence.

NOTE : When you select a time period in the MOTION setting, the monitor enlarges the image and moves it horizontally and vertically. The portions of the image out of the display area aren't visible. To make the entire image visible all the time, arrange it to fit within 90% of the screen area at the center.



■ SIDE BORDER COLOR

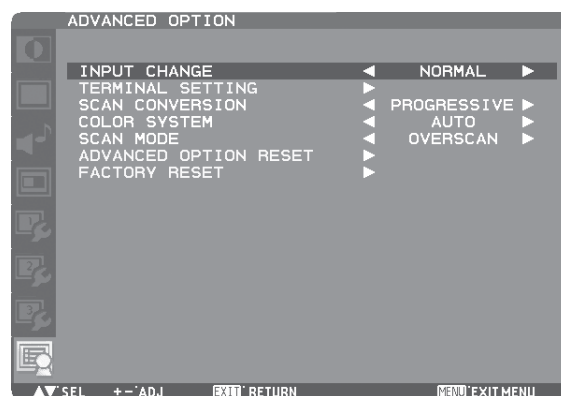
You can adjust the brightness of the black areas displayed on both sides of 4:3 images.

■ CONFIGURATION3 RESET

You can reset all the CONFIGURATION3 settings to the factory defaults.

OSD screen functions (continued)

ADVANCED OPTION



English

■ INPUT CHANGE

You can select the time for input switching from QUICK and NORMAL.

NOTE : When you select QUICK, slight noise may appear.

■ TERMINAL SETTING

You can select the mode to display the RGB1 (HDMI) or RGB2 (DVI-D) signal according to their signal format depending on their source device.

DVI-MODE:

Select this setting when displaying the RGB2 (DVI-D) signal.

Select DVI-PC when the source device is a PC.

Select DVI-HD when the source device is a video device.

HDMI SIGNAL:

Select this setting when displaying the RGB1 (HDMI) signal.

Select LIMITED when displaying the signal that uses 16 to 235 levels of 256 levels for each of R, G, and B.

Select FULL when displaying the signal that uses all 256 levels (from level 0 to 255).

■ SCAN CONVERSION

* For the RGB1 (HDMI), DVD/HD, VIDEO<S>, and VIDEO inputs only.

You can select the IP conversion mode.

PROGRESSIVE: Interlace signals are converted into progressive signals. Select this setting for normal cases.

INTERLACE: Interlace signals are displayed without being converted. Though this setting is suitable for motion images, still images aren't displayed properly.

■ COLOR SYSTEM

* For the VIDEO<S> and VIDEO inputs only.

You can select the color system depending on the video device you use.

AUTO: NTSC, PAL, SECAM, PAL60 or 4.43 NTSC is automatically selected.

NTSC: NTSC

PAL: PAL

SECAM: SECAM

4.43NTSC: 4.43 NTSC

PAL-60: PAL60

NOTE : When you use a video device purchased from overseas, set the COLOR SYSTEM menu.

■ SCAN MODE

* For the RGB1 (HDMI), DVD/HD, VIDEO<S>, and VIDEO inputs only.

You can select the image display area.

OVERSCAN: About 95% of the input image is displayed.

UNDERSCAN: Almost 100% of the input image is displayed.

■ ADVANCED OPTION RESET

You can reset all the ADVANCED OPTION settings to the factory defaults.

■ FACTORY RESET

You can reset all the settings of PICTURE, SCREEN, AUDIO, CONFIGURATION1, CONFIGURATION2, CONFIGURATION3, and ADVANCED OPTION to the factory defaults.

Note that you cannot reset the settings of LANGUAGE and DATE AND TIME.

Other functions

Selecting a video source

To view a video source:

Use the input button to select [VIDEO].

Use the COLOR SYSTEM menu to select [AUTO], [NTSC], [PAL], [SECAM], [PAL60], or [4.43NTSC] according to your video device.

Picture size

RGB1, 2, 3, 4

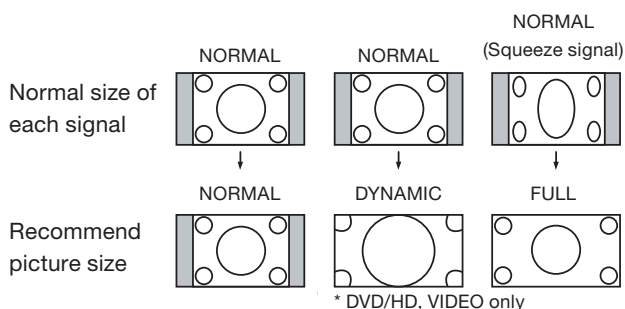
FULL → NORMAL → CUSTOM → REAL

DVD/HD

FULL → NORMAL → DYNAMIC → CUSTOM → REAL

VIDEO, VIDEO<S>

FULL → NORMAL → DYNAMIC → CUSTOM → REAL



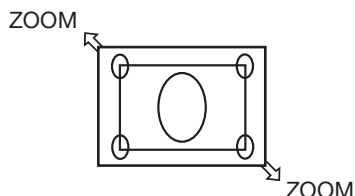
NORMAL: Images supplied from external devices such as PC and DVD fit the screen, keeping their original aspect ratio.

FULL: Images are displayed on the entire screen.

DYNAMIC: 4:3 images are enlarged on the entire screen with non-linearity. (Round images may be cut when enlarged.)

CUSTOM (ZOOM): You can enlarge the displayed images beyond the active display area. The portions of the image out of the display area aren't visible.

REAL: Images are displayed in their original sizes.



Picture mode

RGB1, 2, 3, 4

HIGHBRIGHT → STANDARD → sRGB

DVD/HD, VIDEO, VIDEO<S>

HIGHBRIGHT → STANDARD → CINEMA

Audio input change

RGB1

HDMI ↔ AUDIO1 ↔ AUDIO2 ↔ AUDIO3

Other inputs

AUDIO1 ↔ AUDIO2 ↔ AUDIO3

OSD information

RGB1, 2, 3, 4

RGB2
1024 x 768
48kHz 60Hz
AUDIO : 1
SIZE : FULL

- ← Current selection (RGB2)
- ← Resolution
- ← Audio input mode
- ← Picture size mode

DVD/HD

DVD/HD
AUDIO : 3
SIZE : FULL

- ← Current selection (DVD/HD)
- ← Audio input mode
- ← Picture size mode

VIDEO<S>, VIDEO

VIDEO<S>
NTSC
AUDIO : 3
SIZE : NORMAL

- ← Current selection (VIDEO<S>)
- ← Color system mode
- ← Audio input mode
- ← Picture size mode

PIP, POP

Main : RGB2

Sub : VIDEO<S>

RGB2
1024 x 768
48kHz 60Hz
AUDIO : 1
VIDEO<S>
NTSC
SIZE : FULL

- ← Main picture information
- ← Sub picture information
- ← Main picture size

Control Lock mode

You can lock the operation buttons so that the image adjustments you made aren't changed even when the buttons are pressed.

By holding down both the ▲ and ▼ button on the monitor for 3 seconds or longer, you can lock the operation buttons.

By holding down both the ▲ and ▼ button on the monitor for 3 seconds or longer again, you can unlock the operation buttons.

Other functions (continued)

PIP, POP function

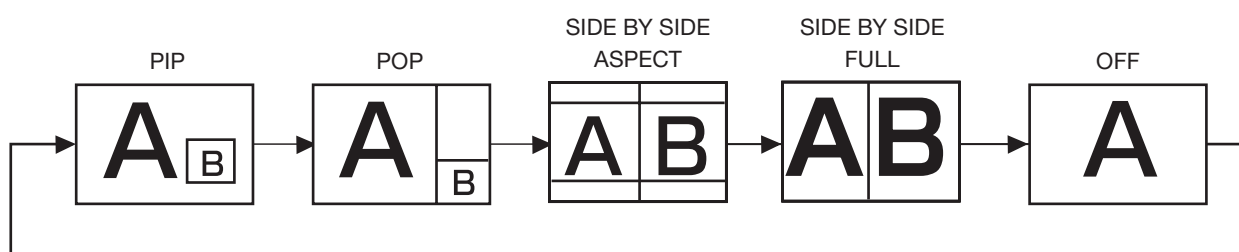
The following table shows the combinations of signal inputs with which the “PIP” and “POP” modes function. However, these modes do not function when the screen size is “CUSTOM” or “REAL”.

		Sub screen						
		RGB1	RGB2	RGB3	RGB4	DVD/HD	VIDEO<S>	VIDEO
Main screen	RGB1	×	×	×	×	○	○	○
	RGB2	×	×	×	×	×	○	○
	RGB3	×	×	×	×	×	○	○
	RGB4	×	×	×	×	×	○	○
	DVD/HD	×	×	×	×	×	○	○
	VIDEO<S>	○	○	○	○	○	×	×
	VIDEO	○	○	○	○	○	×	×

○ : Supported
 × : Not supported

By pressing the PIP ON/OFF button on the wireless remote control, you can change the PIP, POP, and SIDE BY SIDE modes in the order shown below.

Alternatively, you can change the modes using the PIP MODE setting of PIP in the OSD main menu. See page 37.



[Reference]

The resolutions in the PIP and POP modes are as follows:

PIP SIZE	< SMALL >	: 320 pixels X 240 pixels
	< MIDDLE >	: 480 pixels X 320 pixels
	< LARGE >	: 640 pixels X 480 pixels
POP SIZE		: 450 pixels X 338 pixels

NOTE:

Images displayed in the sub picture always fit the PIP sizes shown above irrespective of the aspect ratio of the input image.

Troubleshooting

No picture

- The signal cable should be securely connected to the display card/computer.
- The display card should be securely seated in its slot.
- The Main Power Switch and the computer power switch should be in the ON position.
- Make sure that the correct mode has been selected on the display card or system being used.
(Please consult the display card or system manual to change the graphics mode.)
- Check the monitor and your display card with respect to the compatibility and recommended settings.
- Check the signal cable connectors for bent or pushed-in pins.

Power button does not respond

- Unplug the power cord of the monitor from the AC outlet to turn off and reset the monitor.

Image persistence

- Please be aware that LCD Technology may experience a phenomenon known as “image persistence.” Image persistence occurs when a residual or “ghost” image of a previous image remains visible on the screen. Unlike CRT monitors, LCD monitors’ image persistence is not permanent, but constant images being displayed for a long period of time should be avoided. To alleviate image persistence, turn off the monitor for as long as the previous image was displayed. For example, if an image was on the monitor for one hour and a residual image remains, the monitor should be turned off for one hour to erase the image.

NOTE:

As with all display devices, MITSUBISHI ELECTRIC recommends displaying moving images and using a moving screen saver at regular intervals whenever the screen is idle or turning off the monitor when not in use.

Image is unstable, unfocused or swimming is apparent

- Signal cable should be securely attached to the computer.
- Use the OSD Image Adjust controls to focus and adjust the display by increasing or decreasing the fine adjustment.
When the display mode is changed, the OSD Image Adjust settings may need to be re-adjusted.
- Check the monitor and your display card with respect to the compatibility and recommended signal timings.
- If the displayed text is garbled, change the video mode to the non-interlace mode and use 60 Hz refresh rate.

Image of component signal is greenish

- Check to see if the DVD/HD input connector is selected.

LED on the monitor is not lit (No green or red color can be seen)

- Power Switch should be in the ON position and power cord should be connected.
- Make certain the computer is not in the power-saving mode (touch the keyboard or mouse).

RED LED on the monitor is blinking

- A certain failure may have occurred. Please contact your nearest authorized MITSUBISHI ELECTRIC service facility.

Displayed image is not sized properly

- Use the OSD Image Adjust controls to increase or decrease the coarse adjustment.
- Make sure that the correct mode has been selected on the display card or system being used.
(Please consult the display card or system manual to change the graphics mode.)

Selected resolution is not displayed properly

- Use OSD Display Mode to enter Information menu and check that the appropriate resolution has been selected. If not, select corresponding option.

No sound

- Check to see if the speaker cable is properly connected.
- Check to see if the mute is activated.
- Check to see if the volume is set to the minimum level.

Wireless remote control is not available

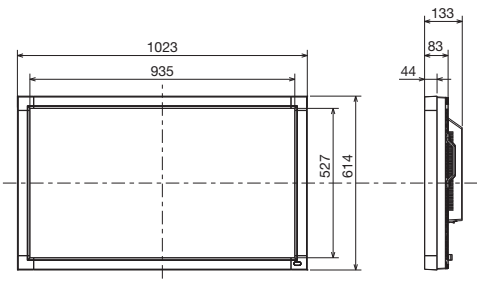
- Check the wireless remote control’s batteries status.
- Check if the batteries are inserted correctly.
- Check if the wireless remote control is pointing at the monitor’s remote sensor.

“SCHEDULE”/“OFF TIMER” function is not working properly

- The “SCHEDULE” function will be disabled when the “OFF TIMER” is set.
- If the “OFF TIMER” function is enabled and the power to the LCD monitor is turned off if the power supply is interrupted unexpectedly, then the “OFF TIMER” will be reset.

Either light vertical or horizontal stripes may appear, depending on the specific display pattern. This is no product fault or degradation.

Specifications

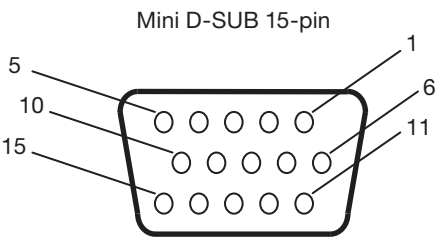
Orientation				Landscape / Portrait	
Dimension (Unit: mm)					
LCD Module	Diagonal (inch)			42" (1067 mm)	
	Display Mode			IPS	
	Panel Pitch			0.485 mm	
	Resolution			1920 x 1080 pixels (Full HD)	
	Color			Approximately 1.06 Billion	
	Brightness (typ.)			500 cd/m ²	
	Contrast ratio			1300 : 1	
	Viewing Angle (CR≥10)			Up and Down 178° / Left and Right 178°	
Response time			9 ms (Gray to Gray)		
Viewable Size (H x V)				930.2 mm x 523.3 mm / 36.6" x 20.6"	
Power Management				VESA DPM	
Plug and Play				VESA DDC2B, DDC/CI	
Auto Adjustment				Yes (Contrast / Position / Phase / Clock)	
OSD user functions				Brightness, Contrast, Black level, Zoom, PIP, Screen saver, Side border color, Gamma selection, Black level expansion, Heat status, Power on delay, Schedule, Tiling, Closed Caption, etc.	
Input / Output Signal	PC Input / Output	Input Connector	(Analog)	MINI D-SUB 15-pin, BNC (R, G, B, H, V) (PC/AV Common)	
			(Digital)	HDMI (PC/AV Common), DVI-D (PC/AV Common)	
		Output Connector		MINI D-SUB 15-pin	
		Horizontal Frequency		15.625/15.734, 31.5 kHz - 91.1 kHz	
		Vertical Frequency		50.0/58.0 Hz - 85.0 Hz	
		Video Signal		Analog: Analog RGB, Digital: TMDS (with HDCP)	
		Sync Signal		Analog: Separate (TTL), Composite (TTL), Sync on Green, Digital: TMDS	
		Supported Resolution		640 x 480, 800 x 600, 1024 x 768, 1280 x 768, 1360 x 768, 1280 x 1024, 1600 x 1200 (Compressed/Simplified), 1920 x 1080, 1920 x 1200 (Compressed/Simplified)	
	AV Input / Output	Input Connector	(Analog)	Composite <BNC>, Separate (Y/C) <S-TERMINAL>, Component (Y/Pb/Pr) <BNC> (PC/AV Common)	
			(Digital)	HDMI (PC/AV Common), DVI-D (PC/AV Common)	
		Output Connector		Analog: Composite <BNC>	
		Supported Resolution		Composite/Separate: NTSC, PAL, SECAM, 4.43 NTSC, PAL60 Component/Digital: 480i, 480p, 576i, 576p, 1080i, 720p, 1080p	
	Audio Input / Output	Input Connector	(Analog)	RCA pin-jack L/R x 2, Stereo mini jack	
			(Digital)	HDMI (digital audio)	
		Output Connector		RCA pin-jack	
	Speaker / Audio Output		External Speaker jack, 7W + 7W (8 ohm)		
	Control Input / Output	Input Connector	RS-232C <D-SUB 9-pin>		
			Output Connector		RS-232C <D-SUB 9-pin>
Power Supply	Input Voltage / Current			2.1 A - 1.0 A @AC100 - 240 V, 50/60 Hz	
	Power Consumption			203 W (182 W without speaker)	
	Power Consumption at Power Saving			Less than 2 W, Mechanical Power SW off: 0 W	
Operation Environment	Temperature			5 - 40°C / 41 - 104°F (Landscape Mode), 5 - 35°C / 41 - 95°F (Portrait Mode)	
	Humidity			20 - 80% (without condensation)	
Storage Environment	Temperature			-20 - 60°C / -4 - 140°F	
	Humidity			10 - 90% (Without condensation) / 90%-3.5% x (Temp-40 °C) regarding over 40 °C	
Dimension (W x H x D)	Net (without stand)			1023 mm (W) x 614 mm (H) x 133 mm (D) / 40.3" (W) x 24.2" (H) x 5.2" (D)	
	Gross			1150 mm (W) x 775 mm (H) x 295 mm (D) / 45.3" (W) x 30.5" (H) x 11.6" (D)	
Weight	Net (without stand)			Approximately 20.5 kg / 45.2 lbs	
	Gross			Approximately 27.7 kg / 61.1 lbs	
Wall mounting interface				12-M6 Screws holes (100 mm / 3.94" pitches) for Monitor mount	
Complied regulatory and guidelines				UL60950-1 / C-UL / EN60950-1 / CE / GOST-R / FCC-B / DOC-B / EN55022-A / EN55024 / EN61000-3-2 / EN61000-3-3 / C-Tick / Energy Star	
Accessory				Power Cord, Video Signal Cable (Mini D-SUB 15-pin to Mini D-SUB 15-pin Cable), User's Manual, Wireless Remote Control, Battery, Clamper (For securing cables), Clamper (To prevent from falling), Screw (M4x8) (For Clamper), Main switch cover, Screw (3x6) (To fix Main switch cover)	

NOTE: Technical specifications are subject to change without notice.

Pin Assignment

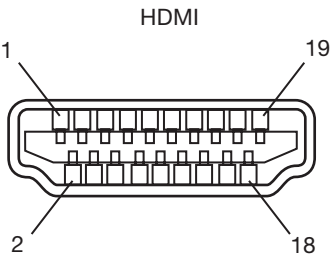
1) Analog RGB input (Mini D-SUB 15-pin): RGB3

Pin No	Name	Pin No	Name
1	Video Signal Red	9	+5V (DDC)
2	Video Signal Green	10	SYNC-GND
3	Video Signal Blue	11	GND
4	GND	12	DDC-SDA
5	DDC-GND	13	H-SYNC
6	Red-GND	14	V-SYNC
7	Green-GND	15	DDC-SCL
8	Blue-GND		



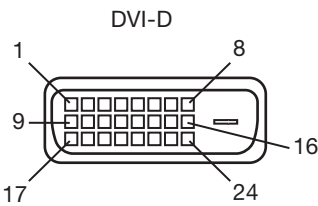
2) Digital RGB input (HDMI): RGB1

Pin - Assignment of HDMI connector:					
1	TMDS Data2+	8	TMDS Data0 Shield	15	SCL
2	TMDS Data2 Shield	9	TMDS Data0-	16	SDA
3	TMDS Data2-	10	TMDS Clock+	17	DDC/CEC Ground
4	TMDS Data1+	11	TMDS Clock Shield	18	+5V Power
5	TMDS Data1 Shield	12	TMDS Clock-	19	Hot Plug Detect
6	TMDS Data1-	13	CEC		
7	TMDS Data0+	14	Reserved (N.C. on device)		



3) Digital RGB input (DVI-D): RGB2

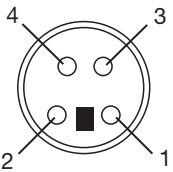
Pin - Assignment of DVI-D connector:					
1	TMDS Data2-	9	TMDS Data1-	17	TMDS Data0-
2	TMDS Data2+	10	TMDS Data1+	18	TMDS Data0+
3	TMDS Data2 Shield	11	TMDS Data1 Shield	19	TMDS Data0 Shield
4	NC	12	NC	20	NC
5	NC	13	NC	21	NC
6	DDC Clock	14	+5V Power	22	TMDS Clock Shield
7	DDC Data	15	Ground (return for +5V, H-SYNC and V-SYNC)	23	TMDS Clock+
8	Analog Vertical Sync	16	Hot Plug Detect	24	TMDS Clock-



4) S-VIDEO input (MINI DIN 4-pin): VIDEO<S>

Pin No	Name
1	GND
2	GND
3	Y (Luminance)
4	C (Chroma)

MINI DIN 4-pin



5) RS-232C input/output

Pin No	Name
1	NC
2	RXD
3	TXD
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

D-SUB 9-pin

